

# GY-HD250U Systems Reference Manual



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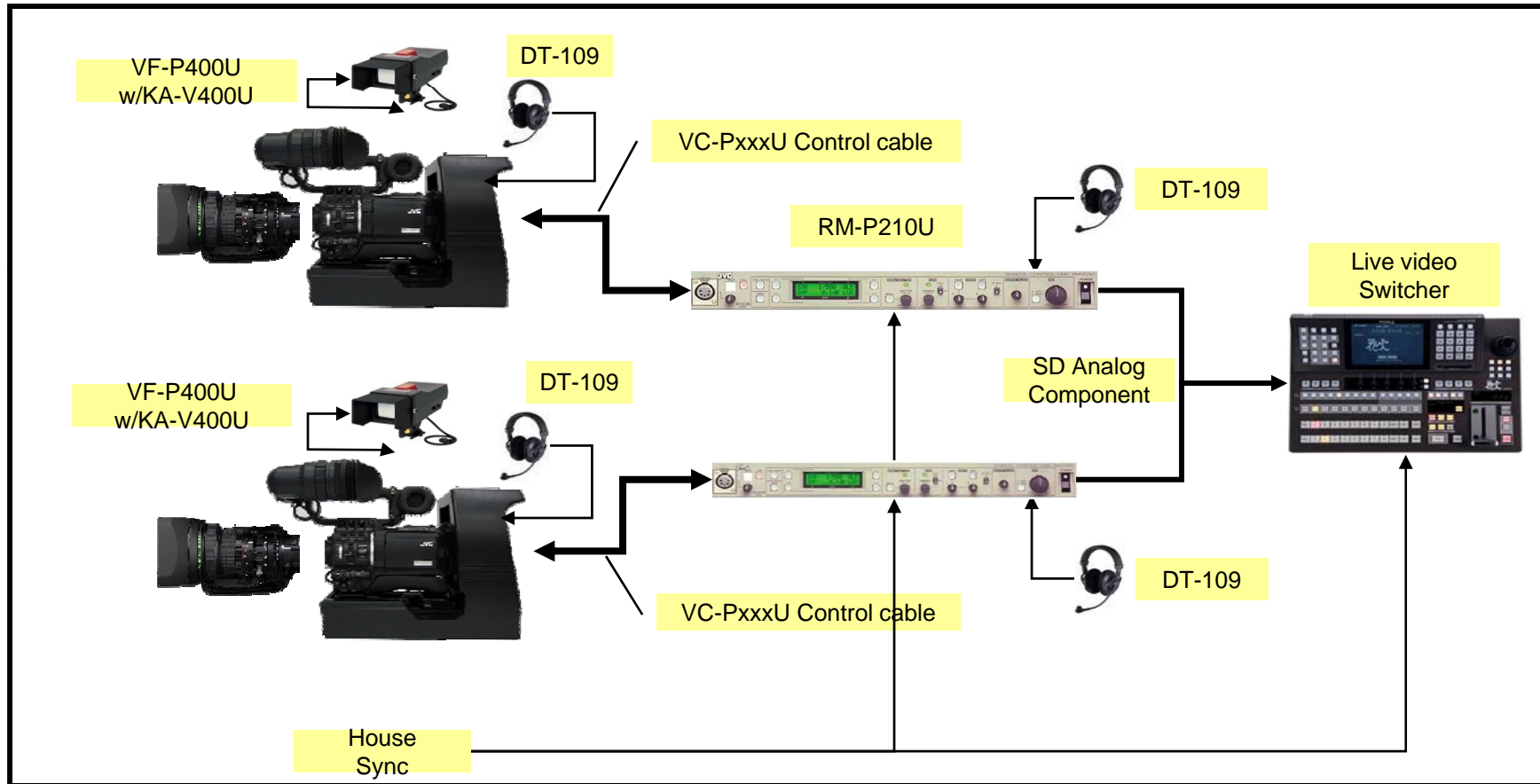
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## Section I Short Length Multi Core Studio Configurations

### Application

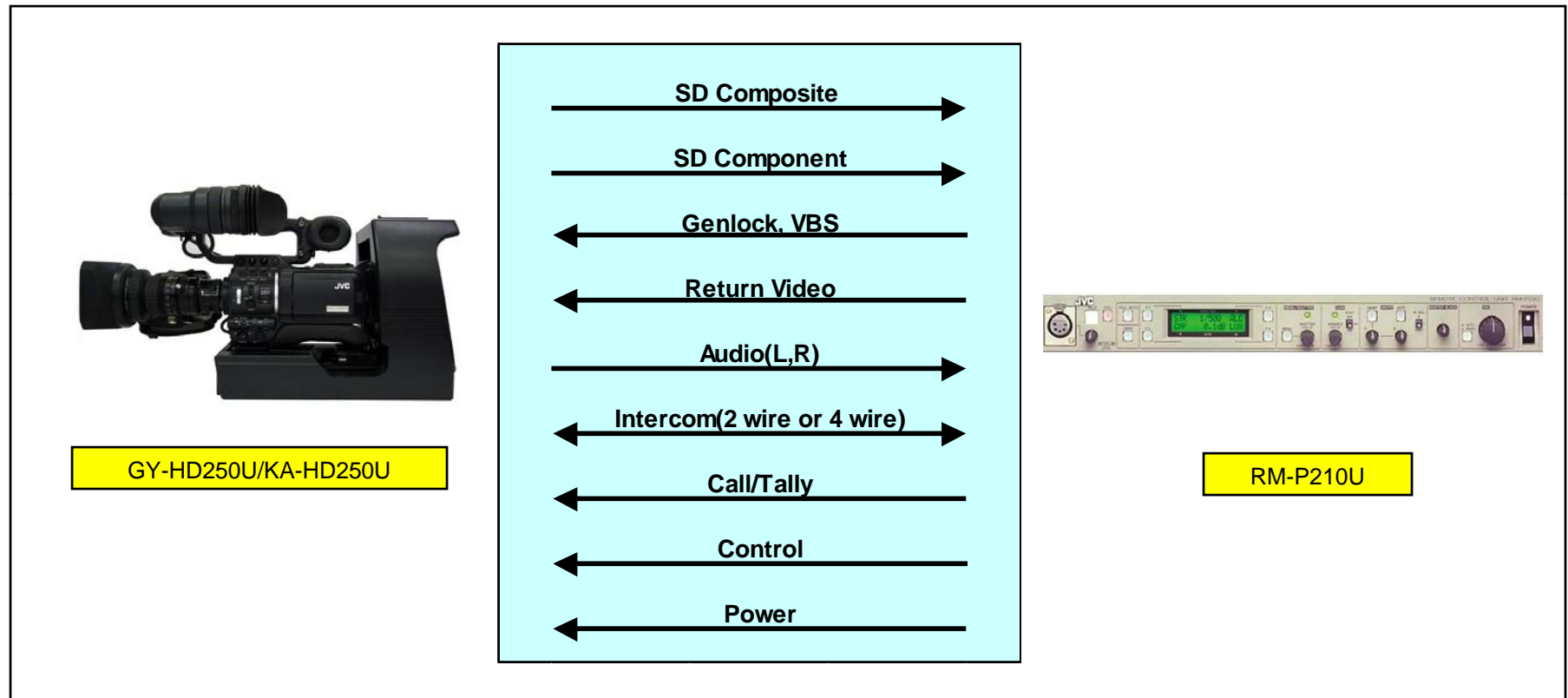
SD -production studio, Schools etc



*SD System Diagram*

## SD Studio Key features and user benefits

- The GY-HD250U w/KA-HD250U can be used to construct an economical SD studio system that produces stunning 16:9 or 4:3 SD images.
- Investment is future proofed. Upgrading from an SD to an HD system will require changing the video interface only.
- When replacing a GY-DV550U, the original CCU the RM-P210U; the 26pin control cable and the studio viewfinder VF-P400U can continue to be used.
- When needed, the GY-HD250U can be used as an ENG camera by detaching it from the KA-HD250U.



**Fig. 1 Signal Flow between CCU and Camera**

**Additional Information**

- GY-HD250U View Finder menu should be set to RGB when VF-P400U is used. All VF displays are available except focus assist
- SD CMP available only; RM-P210U can not pass full bandwidth HD Y, R-Y, B-Y.
- Genlock must be NTSC VBS only – HD Tri level sync can not be passed by RM-P210U back to the GY-HD250U.
- Superimpose characters on Analog output should be turned off – otherwise they will appear at RM-P210U component outputs.
- Sony 26pin Cable can be used to connect RM-P210U with the KA-HD250U.

**SD System Components price list**

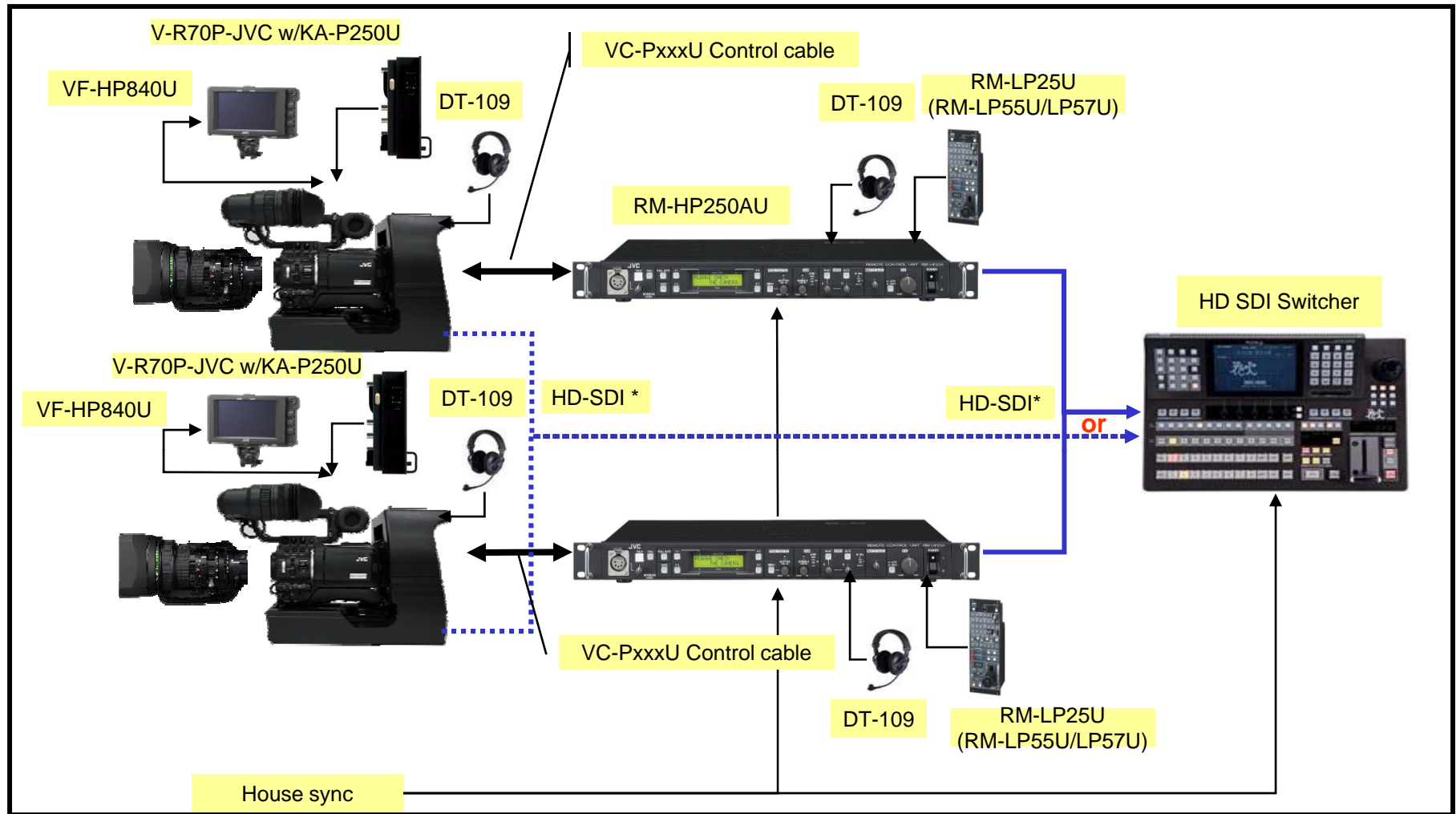
Model	Description	Quantity	Cost	Price	Note
GY-HD250CHU	Pro HD Camcorder	0	\$9,995.00	\$0.00	without 16X lens
GY-HD250U	Pro HD Camcorder	0	\$10,995.00	\$0.00	With 16X Lens
KA-HD250U	Studio Adapter	0	\$3,000.00	\$0.00	
VF-P400U	4" Viewfinder	0	\$875.00	\$0.00	
KA-V400U	20-pin/6-pin Adapter	0	\$225.00	\$0.00	
RM-P210U	Camera Control Unit	0	\$1,995.00	\$0.00	
VC-P110U	Multi core Camera Cable 5M	0	\$480.00	\$0.00	Up to 100m
VC-P112U	Multi core Camera Cable 20M	0	\$1,050.00	\$0.00	
VC-P113U	Multi core Camera Cable 50M	0	\$1,850.00	\$0.00	
VC-P114U	Multi core Camera Cable 100M	0	\$3,250.00	\$0.00	

**Optional Components**

Th 13X3.5BRM	Fujinon Wide Angle	0	\$7,650.00	\$0.00	
Th 17X5BRM	Fujinon Wide Angle	0	\$3,300.00	\$0.00	
HTs18x4.2BRM-M48	Fujinon 18x High Quality Lens	0	\$10,800.00	\$0.00	
KT20x5BKRS	Canon 20x High Quality Lens	0	\$9,800.00	\$0.00	
HZ-FM13	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 17X, 13X, 17.18X
HZ-FM15	Manual Focus Control	0	\$685.00	\$0.00	Canon 20X
HZ FM-500	Manual Focus Control	0	\$820.00	\$0.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	0	\$750.00	\$0.00	Fujinon 16X
MS-11	Zoom & Focus Kit for Fuji 18X	0	\$2,880.00	\$0.00	Fujinon
ACM-12	1/2" to 1/3" Mount Converter	0	\$799.00	\$0.00	
ACM-17	2/3" to 2/3" Mount Converter	0	\$799.00	\$0.00	
Total				\$0.00	

**Third Party Components**

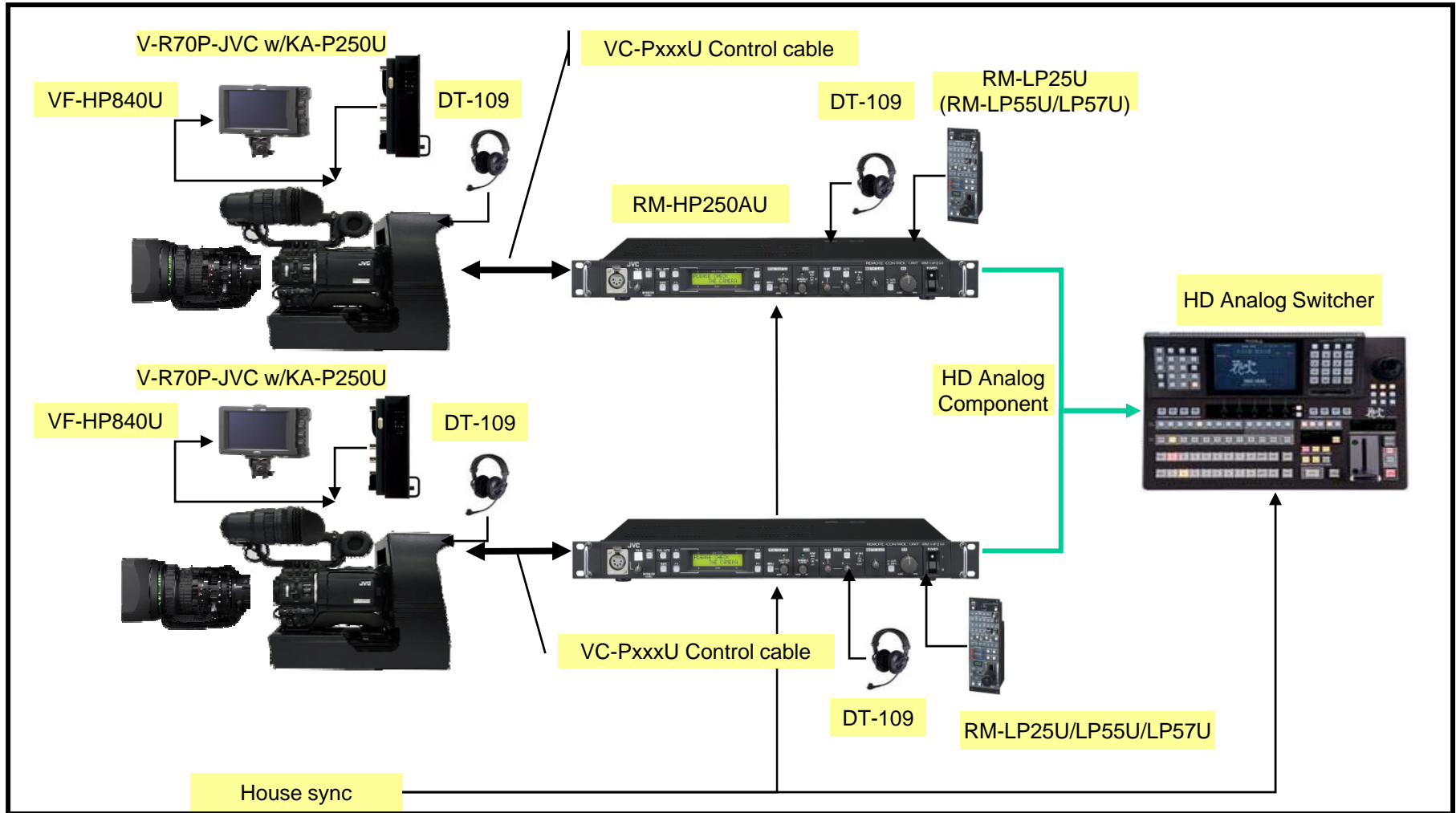
DT-109	Headset without connecting cable	0	\$419.00	\$0.00	BeyerDynamic
K109.38	DT-109 1.5m connecting cable	0	\$49.50	\$0.00	BeyerDynamic
Total				\$0.00	



### HD System Diagram with RM-HP250AU SYSTEM 1 (HD SDI)

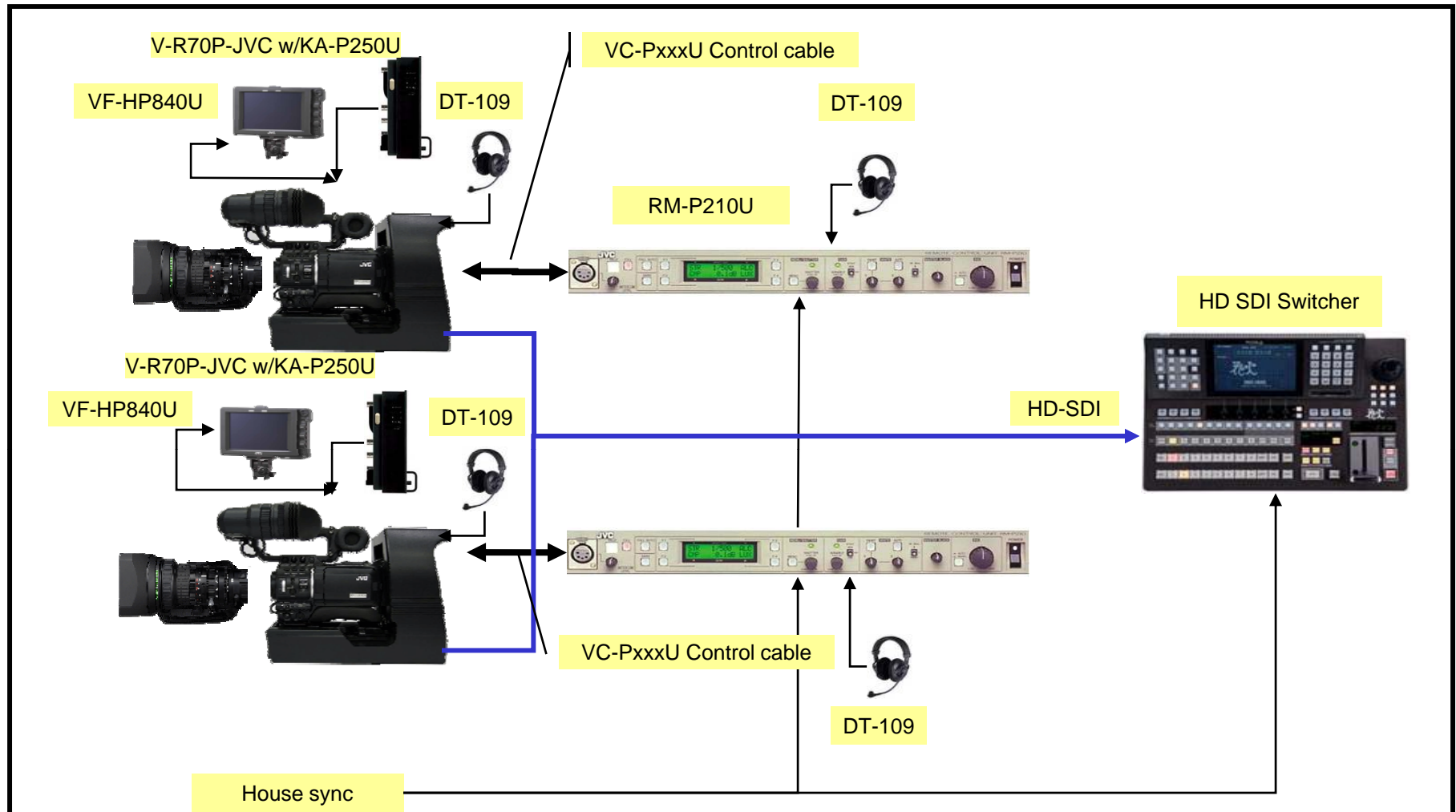
\* Either the HD-SDI outputs of the RM-HP250AU derived from the HD component signal or the HD-SDI output of the GY-HD250U can be applied to the HD-SDI switcher inputs.





**HD System Diagram with RM-HP250AU SYSTEM 2 (HD analog component)**

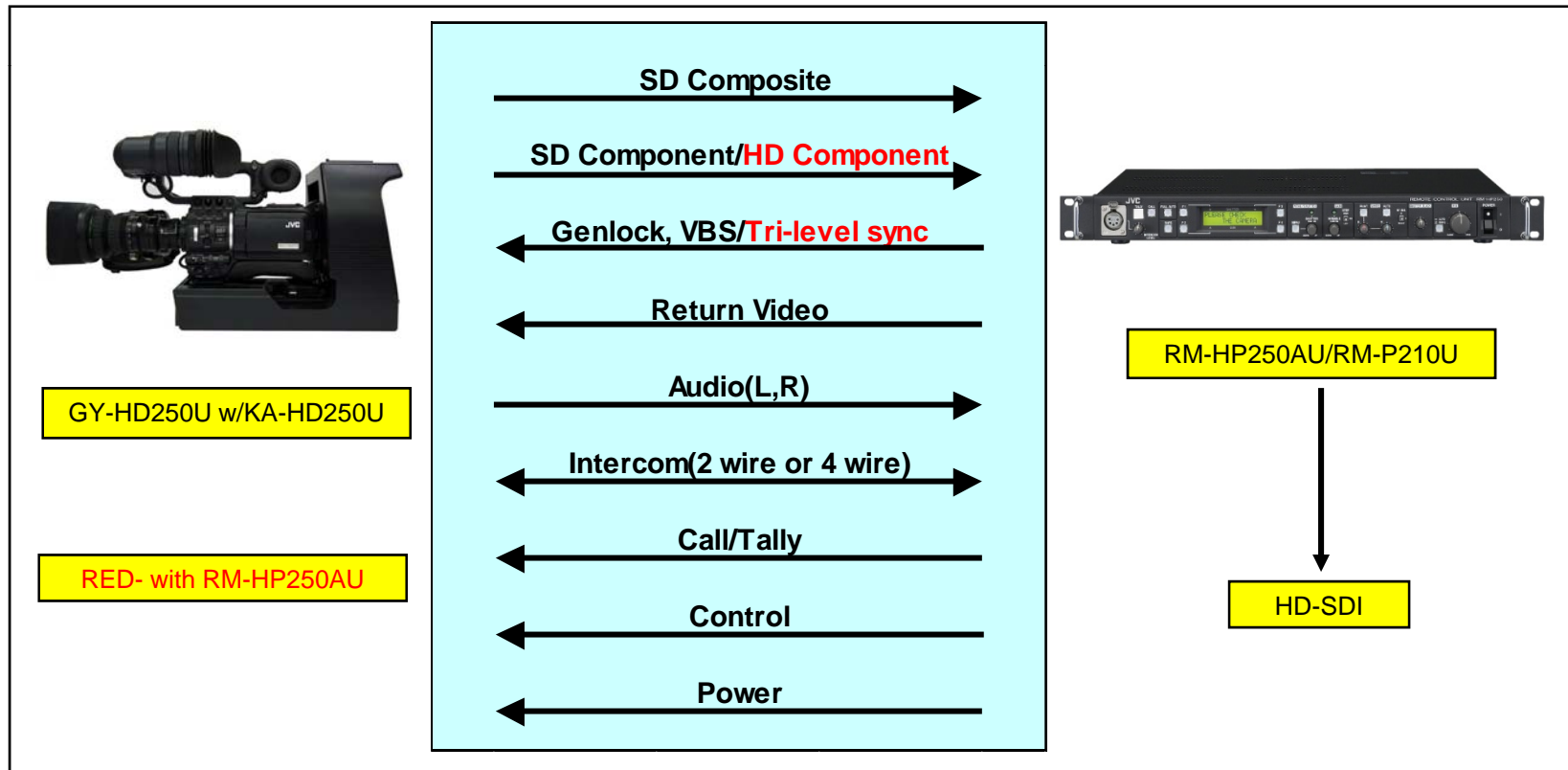
\* The component HD signal output of the RM-HP250AU can be applied to a HD component analog switcher.



**HD System Diagram with RM-P210U**

## HD Studio Key features and user benefits

- The GY-HD250U w/KA-HD250U can be used to build an economical HD studio system that produces stunning images.
- Both HD component and HD-SDI video is supported giving user flexibility of using a component switcher or a HD-SDI switcher.
- The new RM-HP250AU gives the user the flexibility of connecting an additional local remote control to the studio system.
- A live 720P or 1080i signal can be outputted depending on the user's switcher requirements.
- When replacing a GY-DV550U based studio system, the original 26pin control cable and studio viewfinder VF-P400U can continue to be used.
- Existing user's 26Pin Sony Cable can be used to connect RM-HP250AU and KA-HD250U.
- When needed, the GY-HD250U can be readily detached from the KA-HD250U(Sled) and used as an ENG camera.



**Fig 2 HD System Signal Flow between CCU and Studio Camera**

**Additional Information**

- When using a HD Monitor(VF-HP840U or V-R70P-JVC), as a view finder and a component switcher:  
Turn the Analog characters. Menu setting in the GY-HD250U to **OFF**.  
Set the GY-HD250U View Finder menu to **Component**.
- When using a HD Monitor (V-R70P-JVC), as a view finder and a Digital switcher:  
Turn the Analog output superimpose characters Menu setting for the HD-SDI output on the GY-HD250U to **OFF**.  
Set the GY-HD250U View Finder menu to **Component**.
- If a VF-P400U is used as the view finder, set the GY-HD250U's View Finder menu to **RGB**.  
Do not turn on Superimpose characters on the HD-SDI output.
- Set GY-HD250U TALLY MENU setting to "STUDIO".

### HD System components price List

Model	Description	Quantity	Cost	Price	Note
GY-HD250CHU	Pro HD Camcorder	0	\$9,995.00	\$0.00	Camcorder without lens
GY-HD250U	Pro HD Camcorder	0	\$10,995.00	\$0.00	With 16X lens
KA-HD250U	Studio Adapter	0	\$3,000.00	\$0.00	with Y cable up to 70m
VF-P400U	4" SD Viewfinder	0	\$875.00	\$0.00	B & W SD VF
KA-V400U	20-pin/6-pin Adapter	0	\$225.00	\$0.00	Pwr & Signal cable Availability to be determined
VR70P-JVC	7" HD LCD Monitor	0	\$1,810.00	\$0.00	RGB cable + Articulated arm
VCY250US	Y XLR Power Cable	0	\$75.00	\$0.00	Use when 26 Pin cable is less than 70m
KA-P250	Delayed power cable	0	\$450.00	\$0.00	Use when 26Pin Cable > 70m with 7" LCD Monitor
RM-P210U	SD Camera Control	0	\$1,995.00	\$0.00	
RM-HP250AU	HD Camera Control	0	\$3,495.00	\$0.00	Shipping -TBA
VC-P110U	Camera Cable 5M	0	\$480.00	\$0.00	
VC-P112U	Camera Cable 20M	0	\$1,050.00	\$0.00	
VC-P113U	Camera Cable 50M	0	\$1,850.00	\$0.00	
VC-P114U	Camera Cable 100M	0	\$3,250.00	\$0.00	

#### Options

Th13X3.5BRM	Fujinon Wide Angle	0	\$7,650.00	\$0.00	
Th17X5BRM	Fujinon Zoom Lens	0	\$3,300.00	\$0.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	0	\$10,800.00	\$0.00	
KT20x5BKRS	Canon 20x High Quality Lens	0	\$9,800.00	\$0.00	
HZ-FM15	Manual Focus Control	0	\$685.00	\$0.00	Canon 20X
HZ-FM13	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	0	\$750.00	\$0.00	Fujinon 13X,16X,17X, 18X & Canon 20X

**HD System components price List(continued)**

Model	Description	Quantity	Cost	Price	Note
MS-11	Zoom & Focus Kit 18X	0	\$2,880.00	\$0.00	Fujinon 18x
ACM-12	1/2">1/3" Mount Converter	0	\$799.00	\$0.00	
ACM-17	1/2">2/3" Mount Converter	0	\$799.00	\$0.00	
RM-LP55U	Remote Control	0	\$815.00	\$0.00	
RM-LP57U	Remote Control	0	\$910.00	\$0.00	
RM-LP25U	Remote Control	0	\$0.00	\$0.00	Price & Shipping TBA
Total		0		\$0.00	

**Third Part Components**

DT-109	Headset	0	\$419.00	\$0.00	Third party vendor
K109.38	1.5m DT-109 Connecting cable	0	\$49.50	\$0.00	
RG-59	HD-SDI Cable	0		\$0.00	Belden, Canare
RG-6	HD-SDI Cable	0		\$0.00	Belden, Canare
RG-11	HD-SDI Cable	0		\$0.00	Belden, Canare
Total				\$0.00	

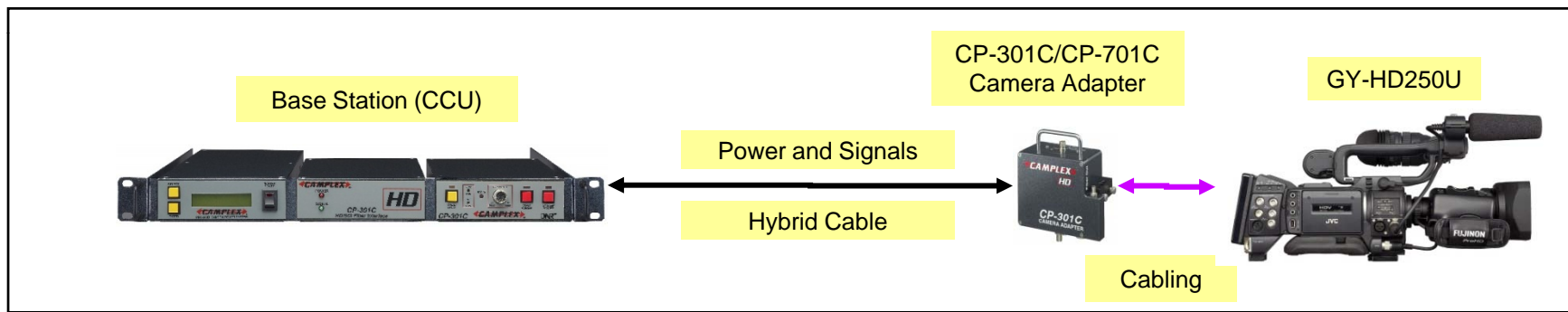
## Section II Medium Length Fiber Cable Studio Configurations

### Typical Applications

Medium length Fiber Cable Studio Configurations are used for EFP, Sports and Events requiring the CCU to be located more than 100m from the Camera's location. When multi-core cable lengths exceed 100m, the multi-Core cable weight becomes excessive. For lengths greater than 100m a fiber cable can be used for applications that do not need power to be delivered to the camera or a hybrid (combined fiber and copper cable) that also delivers power is used to connect the Studio Camera to the base station. Camplex and Telecast Fiber are two companies that produce systems that use either fiber or hybrid cables to connect the camera to the CCU.

### CAMPLEX

CAMPLEX produces economical hybrid cable connected systems that integrate with the GY-HD250U. Their system consists of a Camera Adapter mounted on the Camera, a Hybrid Fiber Cable and a Base Station.



**Complex System Diagram**

The Camera Adapter with additional cabling provides a signal interface between the camera and the Hybrid Cable.

The Hybrid cable consists of a coaxial cable whose center conductor gauge depends on the customer's power requirements and a fiber cable. Both are enclosed in a single sheath.

The Fiber cable carries the HD-SDI optical signal back to the base station where it is converted back to an electrical signal HD-SDI signal.

The center conductor in the coax carries both power and all the required signals between the Base station and the Camera adapter.

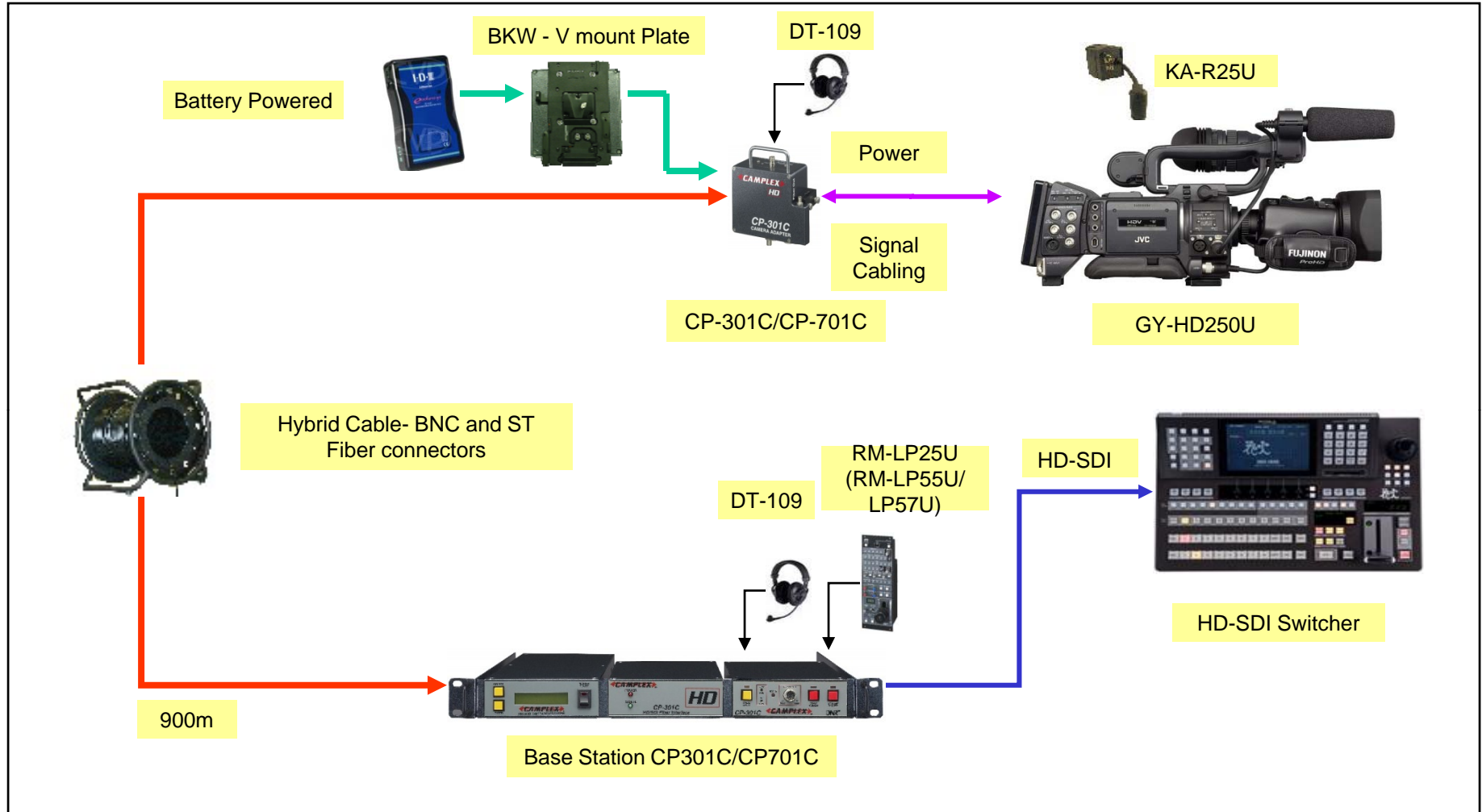
## **Complex System Key features and Customer Benefit**

- Complex's (CP-301C and CP-701C) systems provide an economical medium cable length (up to 900m) solution.
- Due to the camera adapter's light weight (CP301C – 2lbs/CP701 -2.5 lbs) the camera can be shoulder mounted and operated for long periods of time without fatiguing the user.
- The CP-301C CCU and the CP-701C CCU primarily differ in their signal handling capabilities. The CP-701C can pass Component SD signals between the camera and the base station and has a asynchronous return video path back to the camera.

### **Limitations**

- Maximum cable length is limited to 900m with RG11.
- The Hybrid cable becomes very heavy as the cable length increases.
- If the cable is abused, internal fiber or coax can be damaged. It is not as reliable and robust as the tactical fiber cable. In the case that the optical fiber is damaged a spare fiber that is part of the cable can be substituted.
- The CP-301C can pass an HD Tri level genlock signal, but the CP-701C can not pass an HD Tri level genlock signal.





*Shoulder/Tripod mounted CP-301C/CP-701C studio system diagram*

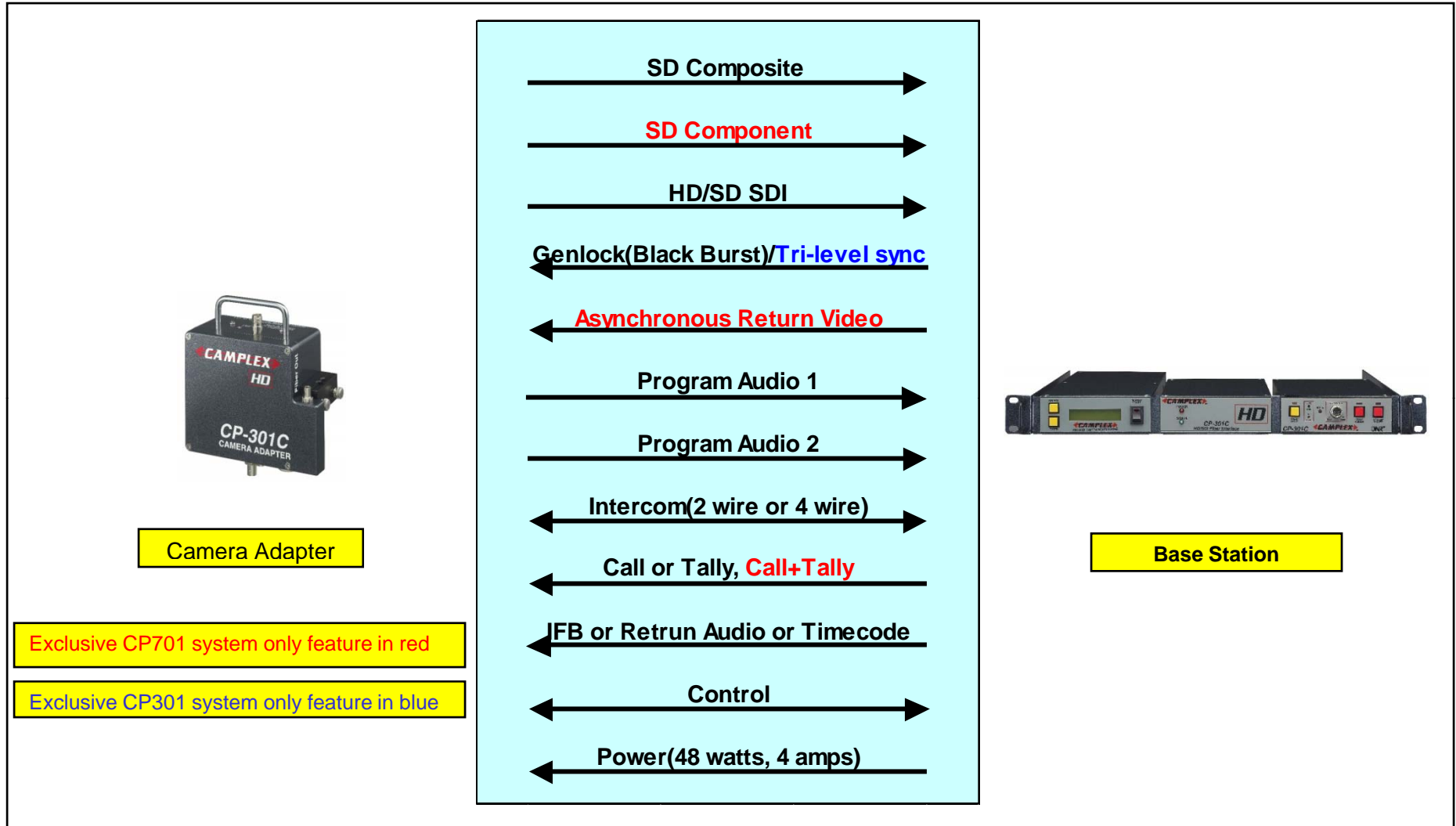


Fig 3. Signal Flow between Camera Adapter and Base Station

**Shoulder/Tripod mountable studio components price list**

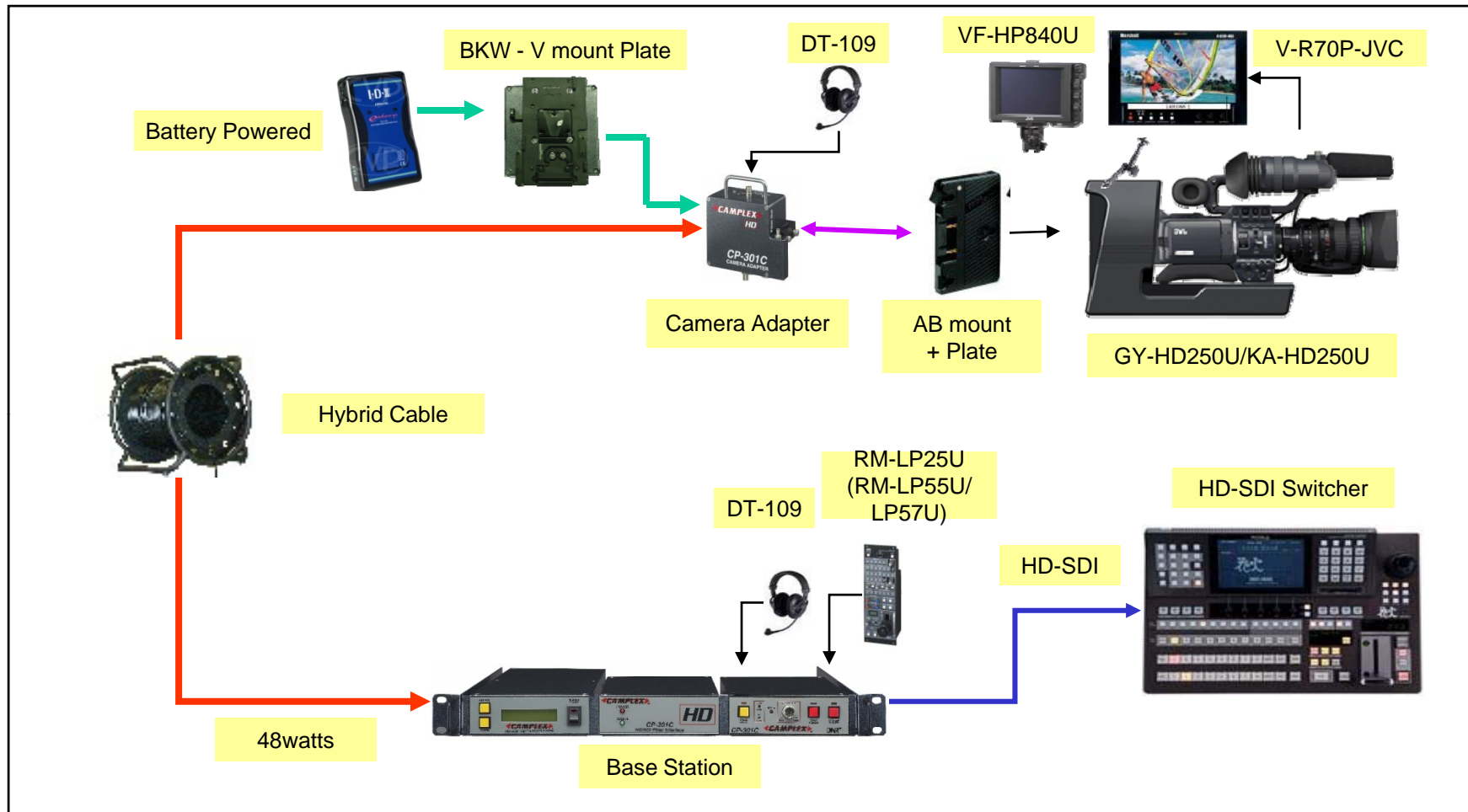
Model	Description	Quantity	Cost	Price	Note
GY-HD250CHU	Pro HD Camcorder	0	\$9,995.00	\$0.00	Without lens
GY-HD250U	Pro HD Camcorder	0	\$10,995.00	\$0.00	With 16X lens
RM-LP25U	Camera Local Remote control	0	\$3,995.00	\$0.00	
RM-LP55U	Camera Local Remote control	0	\$815.00	\$0.00	
RM-LP57U	Camera Local Remote control	0	\$910.00	\$0.00	
KA-R25U	Return Video Box	0	\$599.00	\$0.00	Return video box

**Options**

Th13X3.5BRM	Fujinon Wide Angle lens	0	\$7,650.00	\$0.00	
Th17X5BRM	Fujinon Zoom Lens	0	\$3,300.00	\$0.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	0	\$10,800.00	\$0.00	
KT20x5BKRS	Canon 20x High Quality Lens	0	\$9,800.00	\$0.00	
HZ-FM15U	Manual Focus Control	0	\$685.00	\$0.00	Canon 20X
HZ-FM13U	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 13X, 17X
HZ-FM500	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	0	\$750.00	\$0.00	Fujinon 13x, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	0	\$2,880.00	\$0.00	Fujinon 18x
ACM-12	1/2">1/3" Mount Converter	0	\$799.00	\$0.00	
ACM-17	1/2">2/3" Mount Converter	0	\$799.00	\$0.00	
Total				\$0.00	

**Third party components**

Model	Description	#	Cost	Price	Note
CP701	Camera Adapter + Base station + Pwr	0	13,335	0	This price includes all necessary options
CP301C S5	Camera Adapter + Base stationm + Pwr	0	\$10,134.00	\$0.00	This price includes all necessary options
CP301C S2	Camera Adapter + Base Station + Battery Mount	0	\$8,984.00	\$0.00	For Battery powered applications
Hybrid cable	2 Fibers + Coax	0	\$1.50	\$0.00	Camplex
	Power Surge Absorber	0	\$625.00	\$0.00	Absorbs additional current draw used
	Reel	0	\$500.00	\$0.00	Camplex
	Interface Cabling	0	\$425.00	\$0.00	Camplex Fiber \$400 to \$450



*Sled Mounted GY-HD250U Studio System Diagram*

## **Key Features and User Benefit**

- The CP-301C/CP-701C Sled mounted configuration is an economical medium distance CCU solution.
- This configuration enables viewing and focusing the camera images on a high definition studio monitor..
- Up to 48 Watts of power is supplied to the camera and attached options at an economical price.
- GY-HD250U can be quickly detached from the Sled and used as an ENG camera.
- Flexibility of both hand held and tripod mounted operation.

## **Additional Information**

- VF menu should be set to **Component**.
- In the CP-301C system, there is no separate return video signal. The return video signal, providing it is genlocked, can be applied to the CP-301C's Genlock input. On the camera side, the Genlock signal can be used simultaneously as a Genlock and a return video signal. When using the CP301C's camera adapter's Genlock signal for Genlock and for return video, the signal must be an NTSC VBS.
- Set GY-HD250U TALLY MENU setting to "STUDIO".

**Sled Mounted GY-HD250U studio system price list**

Description	Quantity	Cost	Price	Note
Pro HD Camcorder	0	\$9,995.00	\$0.00	Without lens
Pro HD Camcorder	0	\$10,995.00	\$0.00	With 16X lens
Studio Adapter	0	\$3,000.00	\$0.00	
SD 4" B&W monitor CRT	0	\$875.00	\$0.00	SD View Finder
20Pin to 6Pin Adapter	0	\$225.00	\$0.00	To connect VF-P400U to sled
7" HD LCD Monitor	0	\$1,810.00	\$0.00	Marshall HD Monitor
8.4" HD/SD Viewfinder	0	\$3,200.00	\$0.00	Available Jan. 2008
Y XLR Power cable	0	\$75.00	\$0.00	Distribute power to KA-HD250U and HD monitor
Intermediate plate		N.C.	\$0.00	Call JVC branch
Camera Local Remote Control	0	\$815.00	\$0.00	
Camera Local Remote Control	0	\$910.00	\$0.00	
Camera Local Remote Control	0	\$3,995.00	\$0.00	Price & Shipping Date: TBD
Fujinon Wide Angle	0	\$7,650.00	\$0.00	
Fujinon Zoom Lens	0	\$3,300.00	\$0.00	
Fujinon 18x High Quality Lens	0	\$10,800.00	\$0.00	
Canon 20x High Quality Lens	0	\$9,800.00	\$0.00	
Manual Focus Control	0	\$685.00	\$0.00	Canon 20X
Manual Focus Control	0	\$685.00	\$0.00	Fujinon 13X, 17X
Manual Focus Control	0	\$820.00	\$0.00	Fujinon 16X
Zoom Servo Control	0	\$750.00	\$0.00	Fujinon 13X, 16X, 17X, Canon 20X
Zoom & Focus kit Fuji 18X lens	0	\$2,880.00	\$0.00	Fujinon 18X
1/2">1/3" Mount Converter	0	\$799.00	\$0.00	
1/2">2/3" Mount Converter	0	\$799.00	\$0.00	

**Sled Mounted GY-HD250U studio system price list(continued)**

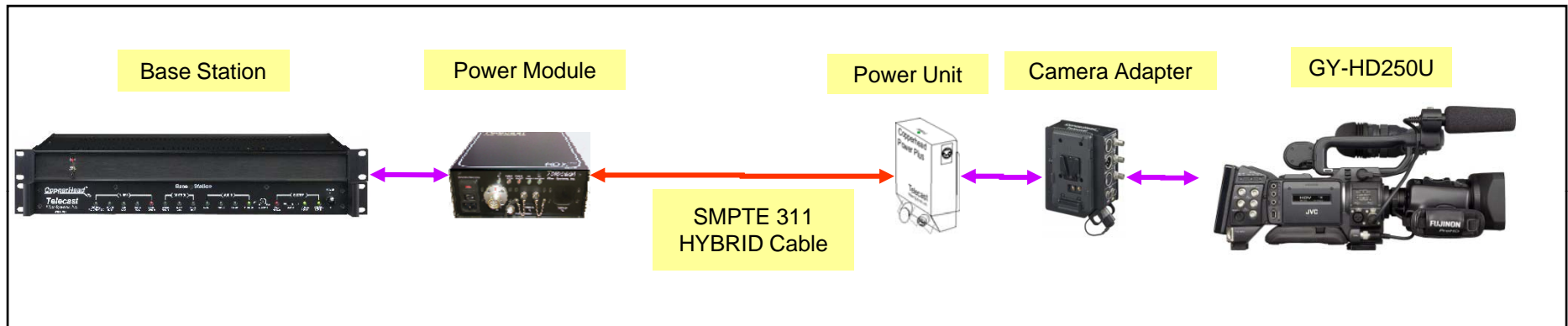
Third party components

Model	Description	Quantity	Cost	Price	Note
CP301C S5	Camera System	0	\$10,134.00	\$0.00	Camera adapter +Base Station + Powerm+ Cabling
Hybrid cable	2 Fibers + Coax	0	\$1.50	\$0.00	Camplex/Clark RG59 - Short cable run
	2 Fibers + Coax	0	\$2.00	\$0.00	Camplex/Clark RG6 Medium cable run
	2 Fibers + Coax	0	\$2.25	\$0.00	Camplex/Clark RG11 Long cable run
PSA-31	Power Surge Absorber	0	\$625.00	\$0.00	Camplex Absorbs additional current draw
	Reel	0	\$500.00	\$0.00	Camplex
Q-X2	Anton Bauer Mount plate	0	\$125.00	\$0.00	For mounting CP301C to back of sled
P-V	IDX Mount Plate	0	\$125.00	\$0.00	For mounting CP301C to back of sled
DT-109	Head Set	0	\$419.00	\$0.00	Beyerdynamic
K109.38	DT-109 Connecting cable	0	\$49.50	\$0.00	
Total		0		\$0.00	

## Section III Long Length Fiber Cable connected Studio Configurations

### Telecast Fiber

Telecast Fiber also produces a fiber connected CCU. Their system consists of a Camera Adapter(Copper Head) , a Power Module (Power Plus) connected to the GY-HD250U; a Hybrid Fiber Cable connects the Camera adapter to the Base Station and an optional Power module. This Configuration can be operated with cable lengths of up to 2K meters



***Telecast Fiber system with Power***

The Camera Adapter provides a signal interface between the camera and the two fibers inside the Hybrid Cable. The Power module converts the 250V AC signal on the copper conductors inside the Hybrid cable to 12V Camera power. The two fibers within the cable handle the signal transmission between the camera and the base station.

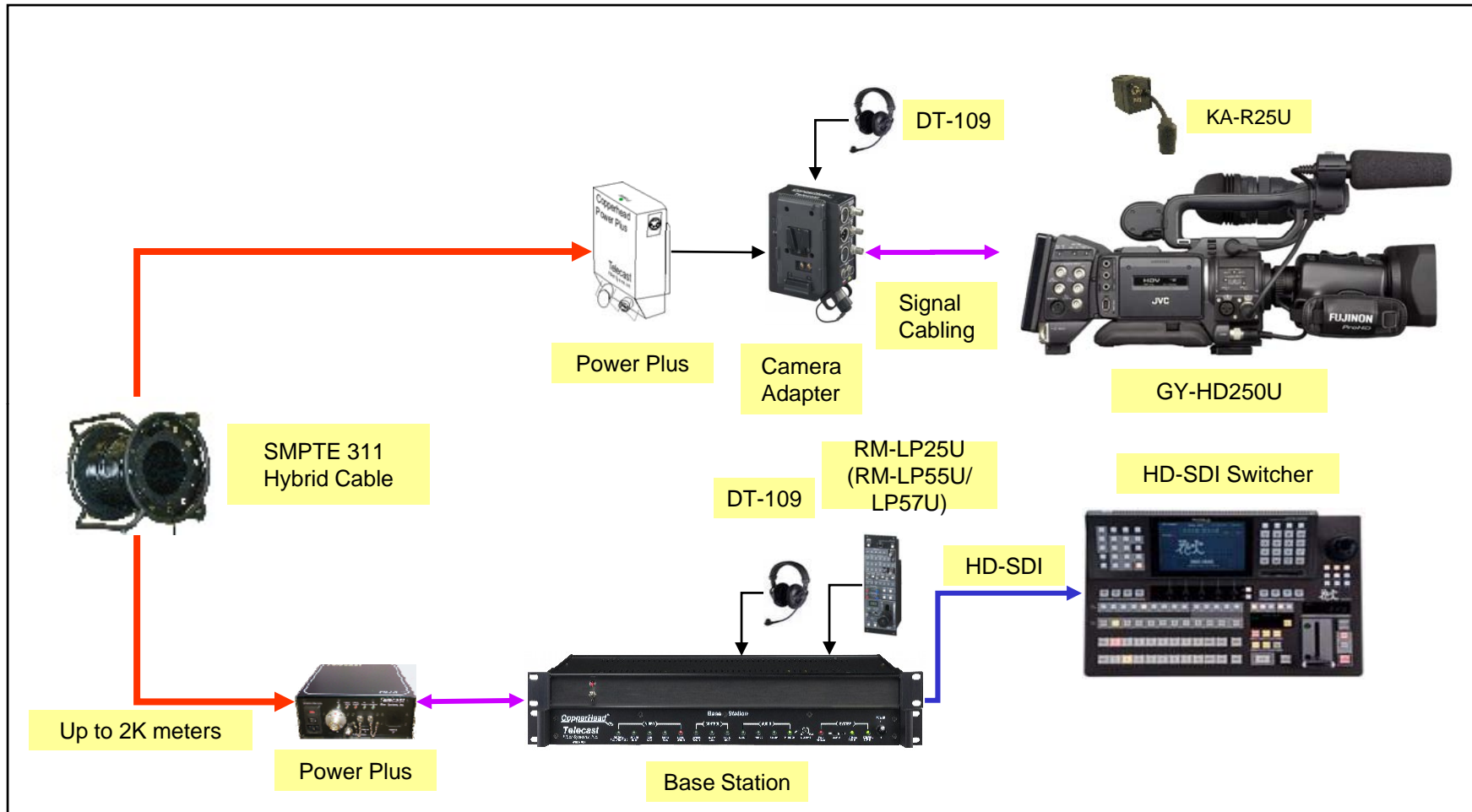
One fiber strand is dedicated to carrying the HD-SDI signal from the camera back to the base station.

The second fiber strand carries all of the other required signals between the camera adapter and the base station.

### Key Features and Customer Benefit

- Up to 150Watts of power is supplied to the studio camera and attached accessories.
- Telecast Fiber system can pass a both a SD VBS or a HD Tri level sync Genlock signal.
- Flexibility of Hand held or Tripod mounted operation
- GY-HD250U can be powered and operated with cable lengths up to 2K meters.





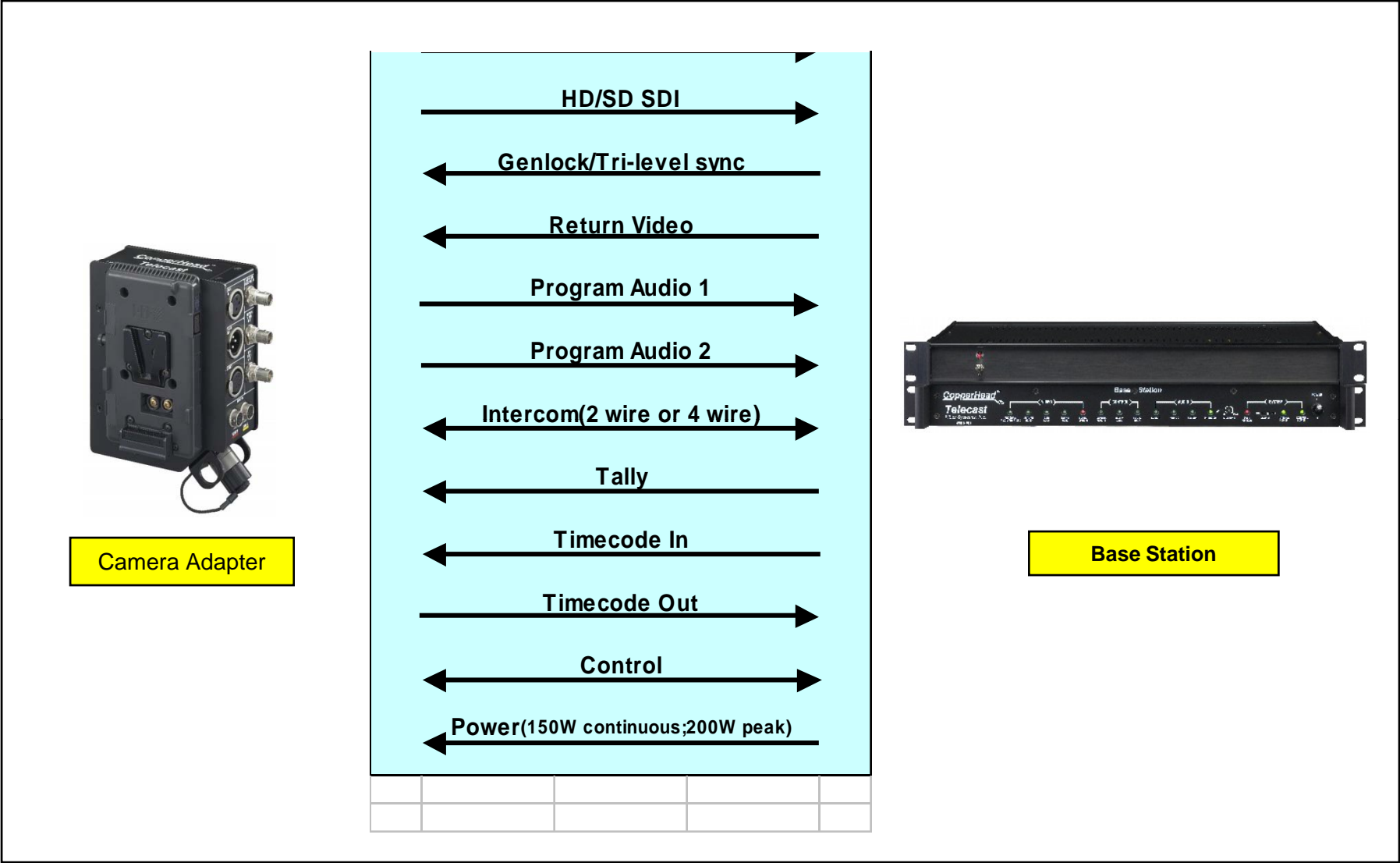


Fig 4 Signal Flow between Camera Adapter and Base Station

**Hand Held/Tripod mounted with Power studio system price list**

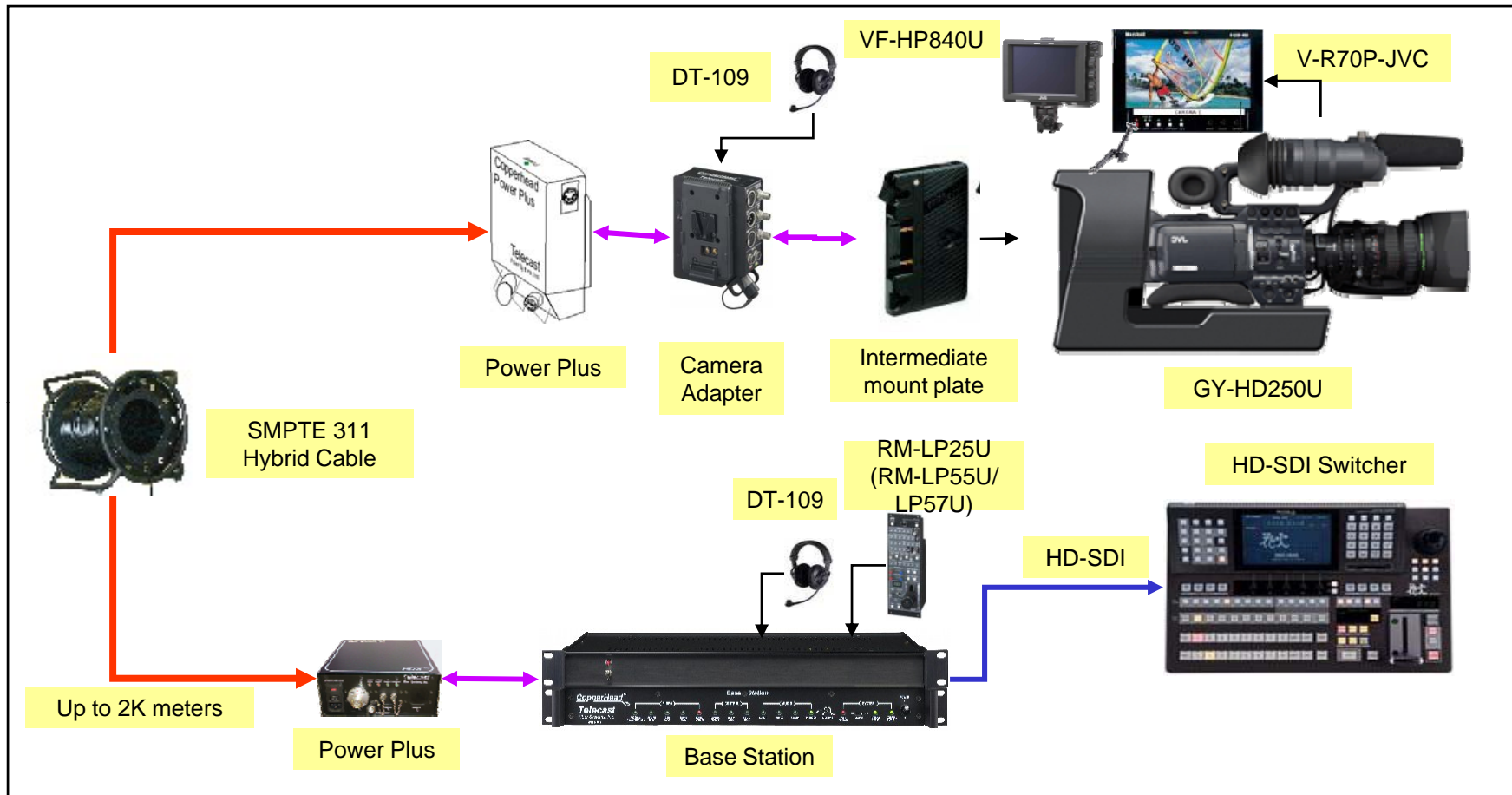
GY-HD250U	Pro HD Camcorder	0	\$10,995.00	\$0.00	With 16X lens
RM-LP55U	Camera Local Remote Control	0	\$815.00	\$0.00	
RM-LP57U	Camera Local Remote Control	0	\$910.00	\$0.00	
RM-LP25U	Camera Local Remote Control	0	\$3,995.00	\$0.00	Joystick
KA-R25U	Return Video Box	0	\$599.00	\$0.00	

**Options**

Th13X3.5BRM	Fujinon Wide Angle	0	\$7,650.00	\$0.00	
Th17X5BRM	Fujinon Zoom Lens	0	\$3,300.00	\$0.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	0	\$10,800.00	\$0.00	
KT20x5BKRS	Canon 20x High Quality Lens	0	\$9,800.00	\$0.00	
HZ-FM15U	Manual Focus Control	0	\$685.00	\$0.00	Canon 20X
HZ-FM13U	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 13X, 17X
HZ-FM500	Manual Focus Control	0	\$820.00	\$0.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	0	\$750.00	\$0.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	0	\$2,880.00	\$0.00	Fujinon 18X
ACM-12	1/2' > 1/3" Mount Converter	0	\$799.00	\$0.00	
ACM-17	1/2">2/3" Mount Converter	0	\$799.00	\$0.00	
Total				\$0.00	

**Third Party Components**

Copperhead+ Base Station	Camera Tx/Rx	0	\$15,000.00	\$0.00	Telecast Fiber
	Reel	0	\$500.00	\$0.00	Telecast Fiber
Power Plus	150 Watt supply	0	\$4,500.00	\$0.00	150W power module at base station and at camera
SMPTE hybrid cable	Has 2 fibers + copper for power	0	\$1.45	\$0.00	Telecast Fiber Cost per foot
	Additional Camera cabling	0	\$500.00		Telecast Fiber \$400 to \$600
Total				\$0.00	



*Sled Mounted/w Power studio system diagram*

## **Telecast System Key Features and User Benefit**

- Sled mounted configuration provides reliable CCU camera operation using SMPTE approved hybrid cable.
- This configuration enables viewing and precise focusing of the camera images on a high definition studio monitor..
- Up to 150Watts of continuous power and 200Watts of peak power is supplied to the camera and attached accessories.
- GY-HD250U can be quickly detached from the Sled and used as an ENG camera.

### **Additional Information**

- VF menu should be set to Component.
- Set GY-HD250U TALLY MENU setting to “STUDIO”.

***Sled mounted/w power studio system components price list***

GY-HD250CHU	Pro HD Camcorder	0	\$9,995.00	\$0.00	Camcorder without lens
GY-HD250U	Pro HD Camcorder	0	\$10,995.00	\$0.00	With 16X lens
KA-HD250U	Studio Adapter	0	\$3,000.00	\$0.00	with Y cable up to 70m
VF-P400U	4" SD Viewfinder	0	\$875.00	\$0.00	B & W SD VF
KA-V400U	20-pin/6-pin Adapter	0	\$225.00	\$0.00	Pwr & Signal cable Availability to be determined
VR70P-JVC	7" HD LCD Monitor	0	\$1,810.00	\$0.00	RGB cable + Articulated arm
VF-HP840U	8.4" HD/SD Viewfinder	0	\$3,200.00	\$0.00	Available Jan. 2008
VCY250US	Y XLR Power Cable	0	\$75.00	\$0.00	Use when 26 Pin cable is less than 70m
RM-LP55U	Camera Local Remote Control	0	\$815.00	\$0.00	
RM-LP57U	Camera Local Remote Control	0	\$910.00	\$0.00	
RM-LP25U	Camera Local Remote Control	0	\$3,995.00	\$0.00	Price: TBD
KA-BP250	Intermediate Plate	0	N.C.	\$0.00	Call JVC branch

**Options**

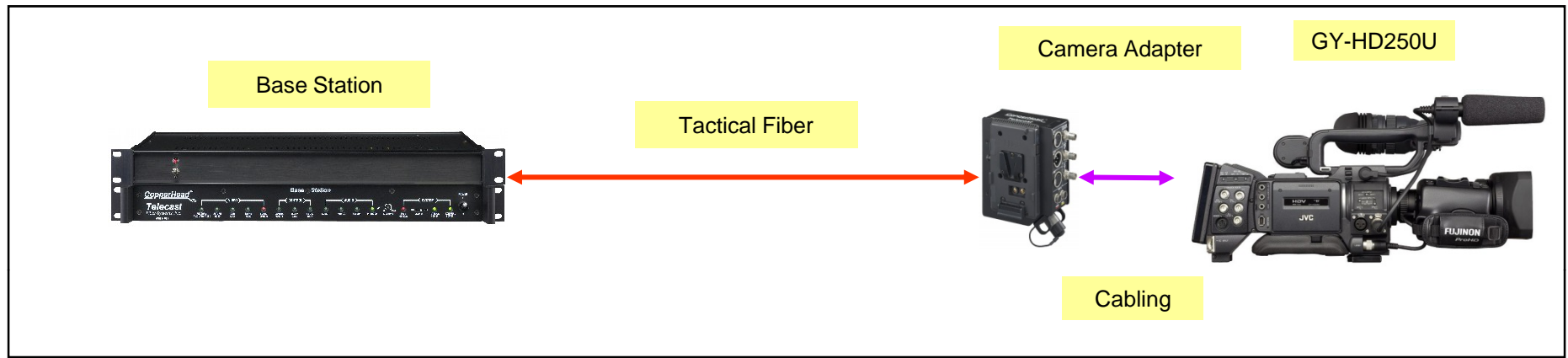
Th13X3.5BRM	Fujinon Wide Angle	0	\$7,650.00	\$0.00	
Th17X5BRM	Fujinon Zoom Lens	0	\$3,300.00	\$0.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	0	\$10,800.00	\$0.00	
KT20x5BKRS	Canon 20x High Quality Lens	0	\$9,800.00	\$0.00	
HZ-FM15	Manual Focus Control	0	\$685.00	\$0.00	Canon 20X
HZ-FM13	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 16X
MS-11	Zoom & Focus Kit 18X	0	\$2,880.00	\$0.00	Fujinon
ACM-12	1/2">1/3" Mount Converter	0	\$799.00	\$0.00	
ACM-17	2/3">1/3" Mount Converter	0	\$799.00	\$0.00	

***Sled mounted/w power studio system components price list(continued)*****Third Party Components**

Model	Description	Quantity	Cost	Price	Note
Copperhead	Camera adapter + base station	0	\$15,000.00	\$0.00	
	Reel	0	\$500.00	\$0.00	
Power Plus	150 Watt supply	0	\$4,500.00	\$0.00	power module at base station and at camera
SYMPTE Hybrid cal	Has 2 fibers + copper for power	0	\$1.45	\$0.00	Cost per foot
	Camera cabling	0	\$500.00	\$0.00	\$400 to \$600 Telecast Fiber
Q-X2	Anton Bauer Plate	0	\$125.00	\$0.00	For Mounting Copperhead
P-V	IDX Mount plate	0	\$125.00	\$0.00	For Mounting Copperhead
DT-109	Head Set	0	\$419.00	\$0.00	Beyerdynamic
K109.38	1.5m DT-109 Connecting cable	0	\$49.50	\$0.00	
MS-11	Zoom & Focus kit Fujinon 18X	0	\$2,880.00	\$0.00	Fujinon 18X
Total				\$0.00	

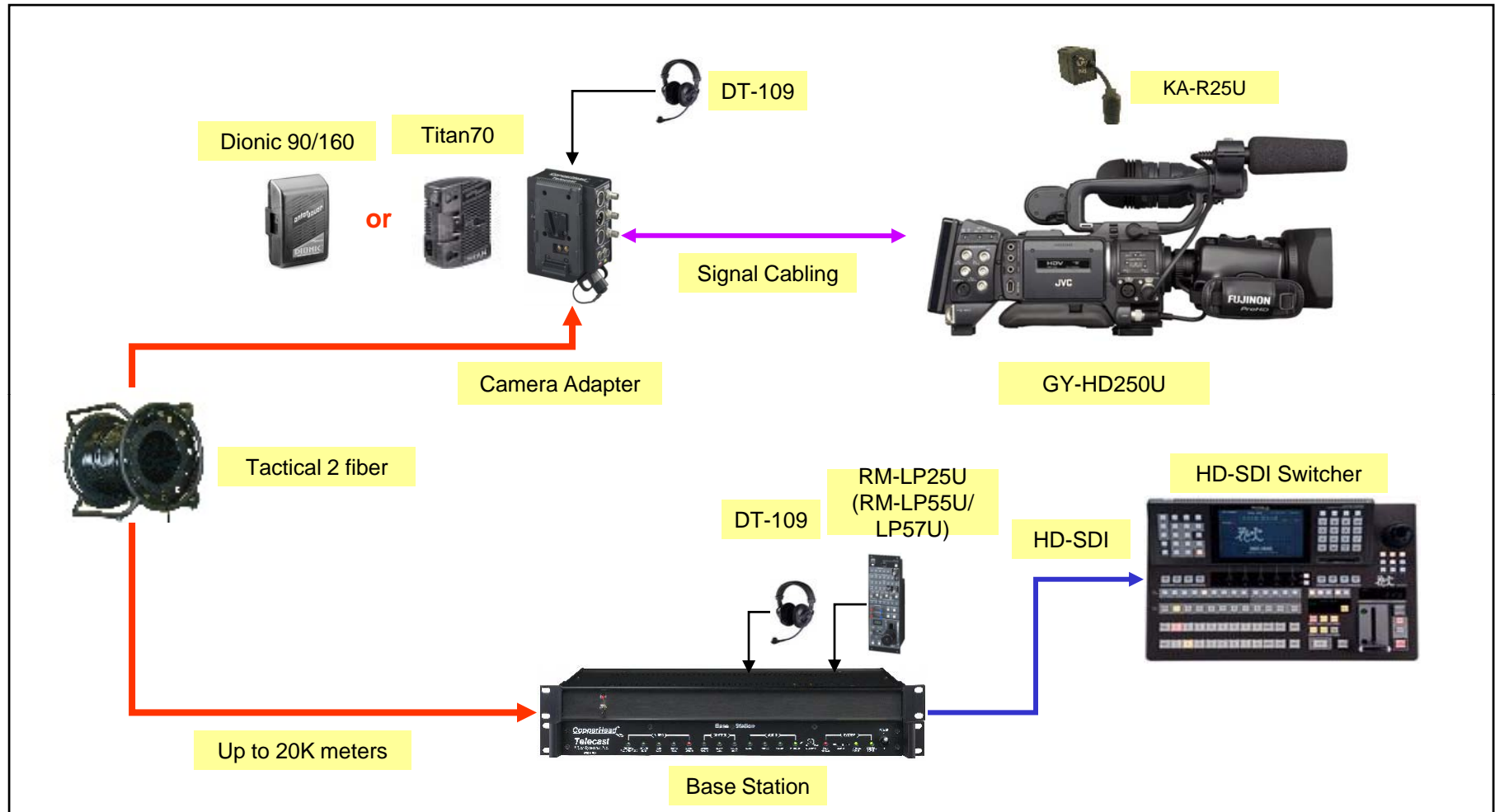
**Telecast Fiber CCU locally Power**

For applications requiring light weight and long cable lengths of up to 20K meters, Telecast Fiber's Camera Adapter (Copper Head) can be connected to the base station via two Tactical fibers. Power to the camera can be supplied via a battery, an off-board four-pin XLR power supply or on-board AC Power supply.

***Extremely long length Telecast Fiber Studio System***

There are two fibers contained within the Tactical fiber cable. One fiber is used to carry the HD-SDI signal between the camera and the Base station. The second fiber carries all of the other required signals between the Camera Adapter and the Base station. Power must be supplied either locally or via an attached battery. One fiber contains the HD-SDI signal. The second fiber contains all of the other required signals.





Hand Held battery powered studio system diagram

**Hand Held battery powered studio system components price list**

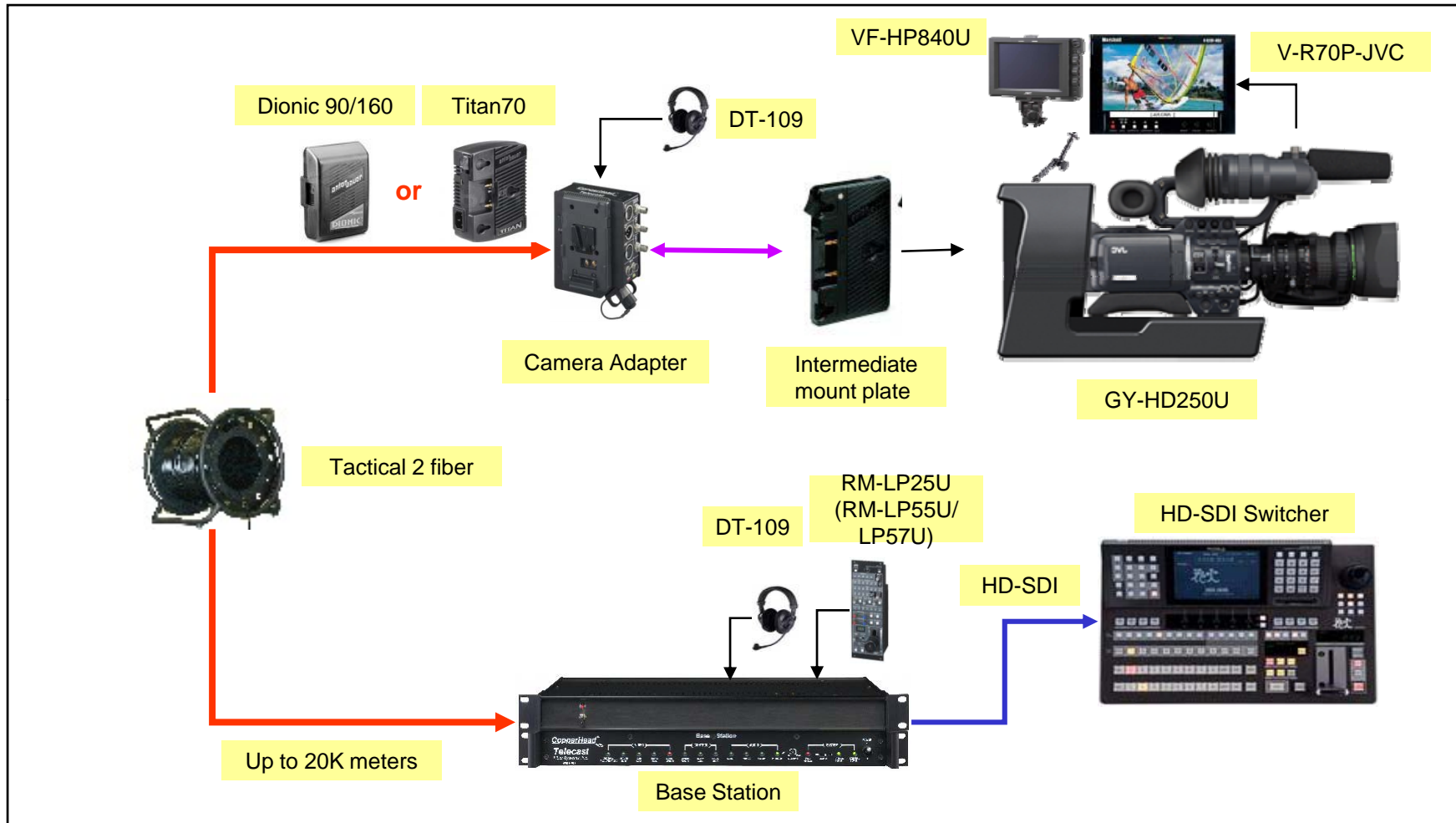
GY-HD250CHU	Pro HD Camcorder	0	\$9,995.00	\$0.00	Without lens
GY-HD250U	Pro HD Camcorder	0	\$10,995.00	\$0.00	With 16X lens
RM-LP55U	Camera Local Remote Control	0	\$815.00	\$0.00	
RM-LP57U	Camera Local Remote Control	0	\$910.00	\$0.00	
RM-LP25U	Camera Local Remote Control	0	\$3,995.00	\$0.00	
KA-R25U	Return Video Box	0	\$599.00	\$0.00	

**Options**

Th13X3.5BRM	Fujinon Wide Angle	0	\$7,650.00	\$0.00	
Th17X5BRM	Fujinon Zoom Lens	0	\$3,300.00	\$0.00	
HTs 18x4.2BRM	Fujinon 18x High Quality Lens	0	\$10,800.00	\$0.00	
KT20x5BKRS	Canon 20x High Quality Lens	0	\$9,800.00	\$0.00	
HZ-FM15U	Manual Focus Control	0	\$685.00	\$0.00	Canon 20X
HZ-FM1U3	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 13X, 17X
HZ-FM500	Manual Focus Control	0	\$820.00	\$0.00	Fujinon 16X
HZ-ZS13BU	Zoom Servo Control	0	\$750.00	\$0.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	0	\$2,880.00	\$0.00	Fujinon 18X
ACM-12	1/2">1/3" Mount Converter	0	\$799.00	\$0.00	
ACM-17	2/3">1/3" Mount Converter	0	\$799.00	\$0.00	
Total				\$0.00	

**Third Party Components**

Copperhead	Camera Adapter + Base station	0	\$15,000.00	\$0.00	Telecast Fiber
Tactical Fiber 2	2 fibers in cable	0	\$1.35	\$0.00	Telecast Fiber cost per foot
	Reel	0	\$500.00	\$0.00	Telecast Fiber
	Hermaphrodite connectors	0	\$500.00	\$0.00	Telecast Fiber Need two per system
	Camera cabling	0	\$500.00		Telecast Fiber \$400 to \$600
Total				\$0.00	



*Sled Mounted with battery or off board of on board AC power studio system diagram*

**Sled Mounted with battery power studio system components price list**

Model	Description	Quantity	Cost	Price	Note
GY-HD250CHU	Pro HD Camcorder	0	\$9,995.00	\$0.00	Without lens
GY-HD250U	Pro HD Camcorder	0	\$10,995.00	\$0.00	With 16X lens
KA-HD250U	Studio Adapter	0	\$3,000.00	\$0.00	
VRP70-JVC	7" HD LCD Monitor	0	\$1,810.00	\$0.00	
VF-HP840U	8.4" HD/SD Viewfinder	0	\$3,200.00	\$0.00	Available Jan. 2008
VCY250US	Y XLR power cable	0	\$75.00	\$0.00	Distribute pwr to Sled + Monitor
RM-LP55U	Camera Local Remote Control	0	\$815.00	\$0.00	
RM-LP57U	Camera Local Remote Control	0	\$910.00	\$0.00	
RM-LP25U	Camera Local Remote Control	0	\$3,995.00	\$0.00	Price:TBD
KA-BP250	Intermediate plate	0	N.C.	\$0.00	Call JVC branch

**Options**

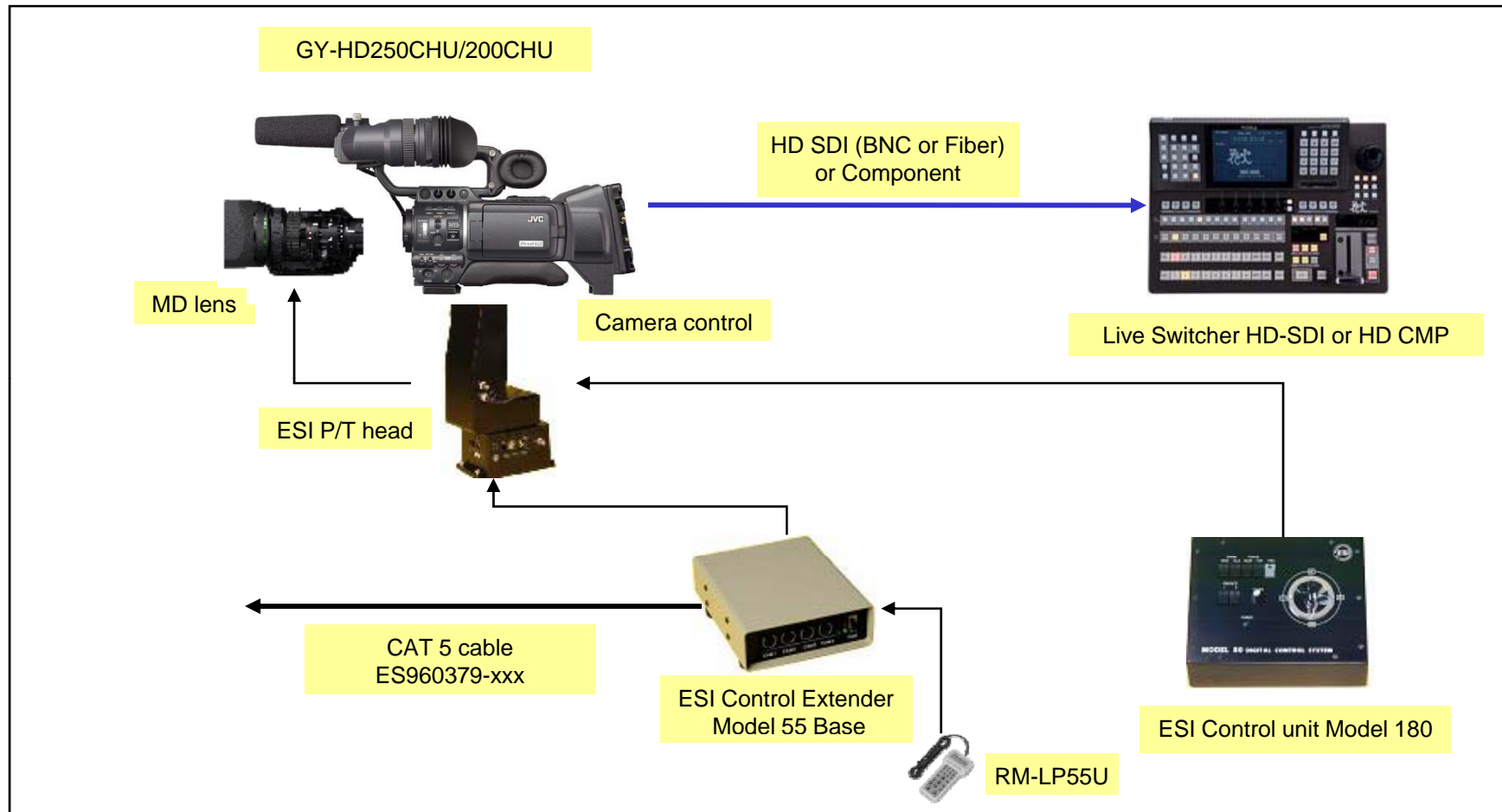
Th13X3.5BRM	Fujinon Wide Angle	0	\$7,650.00	\$0.00	
Th17X5BRM	Fujinon Zoom Lens	0	\$3,300.00	\$0.00	
HTs18x4.2BRM-M4	Fujinon 18x High Quality Lens	0	\$10,800.00	\$0.00	
KT20x5BKRS	Canon 20x High Quality Lens	0	\$9,800.00	\$0.00	
HZ-FM15U	Manual Focus Control	0	\$685.00	\$0.00	Canon 20X
HZ-FM13U	Manual Focus Control	0	\$685.00	\$0.00	Fujinon 13X, 17X
HZ-FM500	Manual Focus Control	0	\$820.00	\$0.00	Fujinon 16X
HZ-ZS13BU	Zoom Servo Control	0	\$750.00	\$0.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fujinon 18X	0	\$2,880.00	\$0.00	Fujinon 18X
ACM-12	1/2">1/3" Mount Converter	0	\$799.00	\$0.00	
ACM-17	2/3">1/3" Mount Converter	0	\$799.00	\$0.00	

**Sled Mounted with battery power studio system components price list**

Third Party Components

Model	Description	Quantity	Cost	Price	Note
Copperhead	Camera adapter + base station	0	\$15,000.00	\$0.00	
Tactical Fiber 2	2 fibers incable \$1.5/ft	0	\$1.35	\$0.00	cost per foot
	Reel	0	\$500.00	\$0.00	
	Hermaphrodite connectors	0	\$500.00	\$0.00	Need two per system
	Camera cabling	0	\$500.00	\$0.00	\$400 to \$600 Telecast Fiber
Q-X2	Anton Bauer Plate	0	\$125.00	\$0.00	For Mounting Copperhead
P-V	IDX Mount plate	0	\$125.00	\$0.00	For Mounting Copperhead
DT-109	Head Set	0	\$419.00	\$0.00	Beyerdynamic
K109.38	1.5m DT-109 Connecting cable	0	\$49.50	\$0.00	
Total				\$0.00	

## Section IV POV System configuration



**POV Pan/Tilt System**

## Key features and user benefits

- Affordable HD POV pan tilt system replacement for the SD POV KY-560U system. If user is converting from a SD Pan Tilt system some of the existing components such as Pan/Tilt controller, cables, power supplies, etc. can be reused.
- A live 1080i or 720P60 HD-SDI or HD Component signal can be outputted and applied to the switcher.
- Cameras can be controlled from up to 2000 ft.
- When needed the GY-HD250U/GY-HD200U can be easily used as an ENG camera by detaching it from the Pan/Tilt head.
- Upon request ESI can supply camera power to the camera from the Pan/Tilt head.

## *POV System Components Price List*

Model	Description	Quantity	Cost	Price	Note
GY-HD250CH	Pro HD Camcorder	0	\$9,995.00	0	Camcorder head
GY-HD200CHU	Pro HD Camcorder		\$7,995.00	0	
Th17x5BMDU	Fujinon 17x MD Lens	0	\$4,000.00	0	Motorized Lens
RM-LP55U	Local Remote Control Unit	0	\$815.00	0	Remote control

### Options

ACM-12	1/2">1/3" Mount Converter	0	\$799.00	0	
ACM-17	1/2">2/3" Mount Converter	0	\$799.00	0	
Total				0	

### Third Party Components

DPT130	Pan/Tilt Head	0	\$5,735.00	0	from ESI
Model 180	Pan/Tilt Controller	0	\$3,950.00	0	Controls up to 4 P/T heads
ES960379-xxx	CAT5 cable (RS-422 Cable)	0	\$2.15	0	price per foot of cable ESI
IA60a	IDX Battery Charger/Supply	0	\$395.00	0	for GY-HD200/250
Model 55 Base	Base Unit		\$1,020.00	0	ESI Camera remote control extender – extends up to 4 RM-LP55U
Model 55 Cam unit	RS-422 to RS232C Converter	0	\$305.00	0	One for each camera in system.
Total				0	

## Section V Supplementary Information

### VF Signal Menu

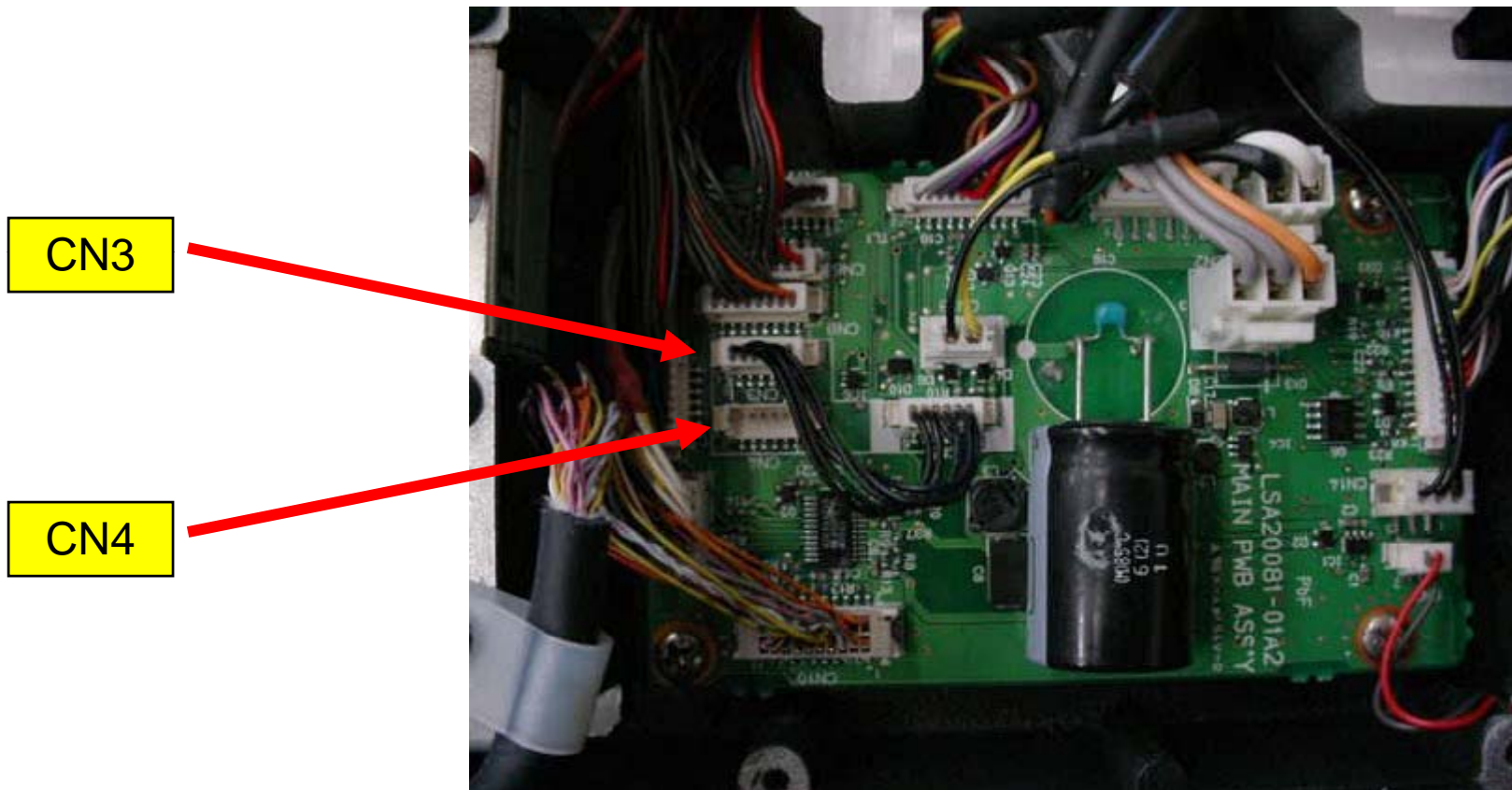


Mode	VF Signal	Y, Pr, Pb	20-Pin out	Eng VF
HDV	RGB	Y, Pr, Pb 720p60	RGB 480i	OK
	CPS	No Output	CPS 480i	No visible video
	CMP	Y, Pr, Pb 720p60	Y, Pr, Pb 720p60	No visible video
	Y	No Output	Y 480i	No visible video
DV	RGB	Y, Pr, Pb 480i	RGB	OK
	CPS	No output	CPS	No visible video
	CMP	Y, Pr, Pb 480i	Y, Pr, Pb 480i	No visible video
	Y	No output	Y 480i	No visible video



**How to use Sony 26Pin Cable with KA-HD250U**

1. Disconnect the CABLE from the CN3 on the KA-HD250U's MAIN board \*.
  2. Reconnect cable to CN4 on the MAIN board.
- \* See service manual for disassembly instructions



## How to use Sony 26Pin cable with RM-P210U

### 1- Setup for Sony Cable

Remove the top-cover and change the setting of S35 & S36 dip-switch blocks located on the 26-pin connector board.

- (a) S35: All switches must be set UP.
- (b) S36: All switches must be set DOWN.

### 2- Adjustment

Re-adjustment of the transmit Voltage (refer to SM).

- (a) VOLT ADJ 15V: adjust to 15VDC +/- 0.2V
- (b) VOLT ADJ 17V: adjust to 16VDC +/- 0.2V
- (c) VOLT ADJ 19V: adjust to 16VDC +/- 0.2V

*Note 1: If the Voltage is not correct, the viewfinder may be damaged due to over heating.*

*Note 2: Receive Voltage at pin-A and pin-B of the 26-pin **MUST** be lower than 15V. If the voltage exceeds 15VDC, adjustment of (a) "VOLT ADJ 17V" and (b) "VOLT ADJ 19V" must be re-adjusted from 16VDC to 15VDC.*

GY-HD250U/KA-HD250U and JVC CCUs Power connectivity table

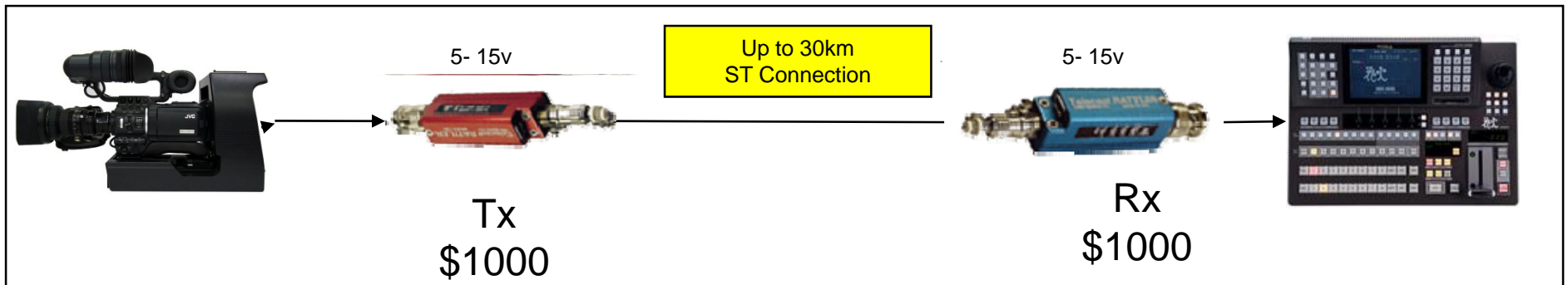
		RM-P210U		RM-P200U		RM-P300U	
		VF-P400	VF-P550B	VF-P400	VF-P550B	VF-P400	VF-P550B
20m(VC-P112)	Operation	OK	OK	NG	NG	OK	OK
50m(VC-P113)	Operation	OK	OK	NG	NG	OK	OK
100m(VC-P114)	Operation	OK	OK	NG	NG	NG	NG

HD-SDI Cable Lengths

HD-SDI BNC Cable	Distance (m)	Distance (ft)
RG-11	150	500
RG-7	125	400
RG-6	100	330
RG-59	80	260

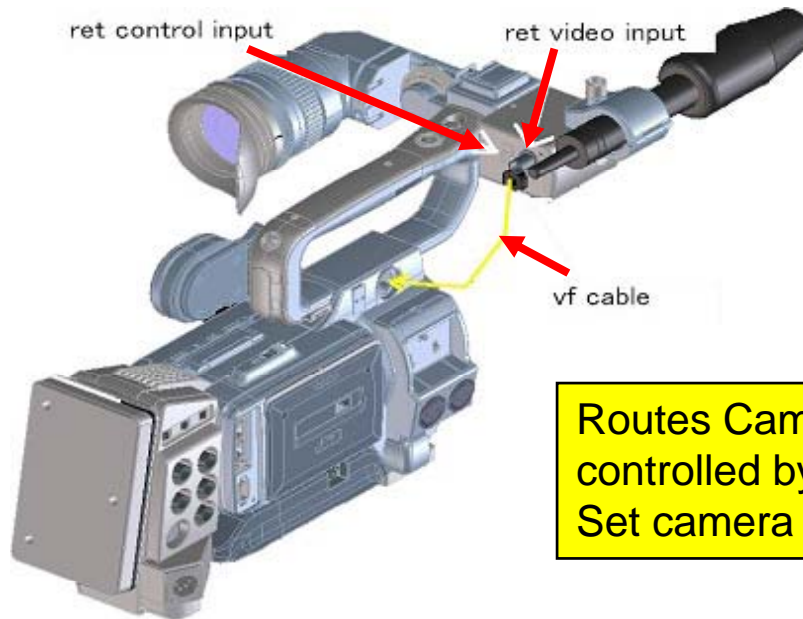
***Telecast Fiber Rattler – Fiber Tx/Rx***

The rattler Tx and Rx converts a electrical digital signal to an optical signal at the Tx end and from a optical signal to a digital signal at the Rx end. It is used to extend the transmission distance of a HD/SD SDI signal up to 30K meters

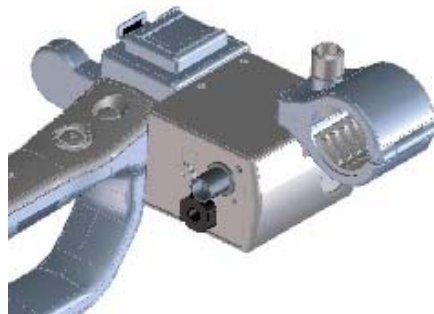


## Section VI Accessories

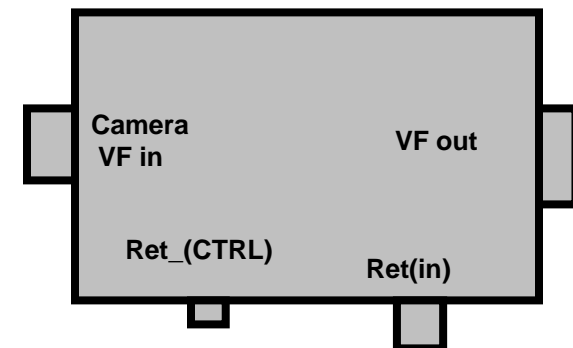
### KA-R25U Return Video Box

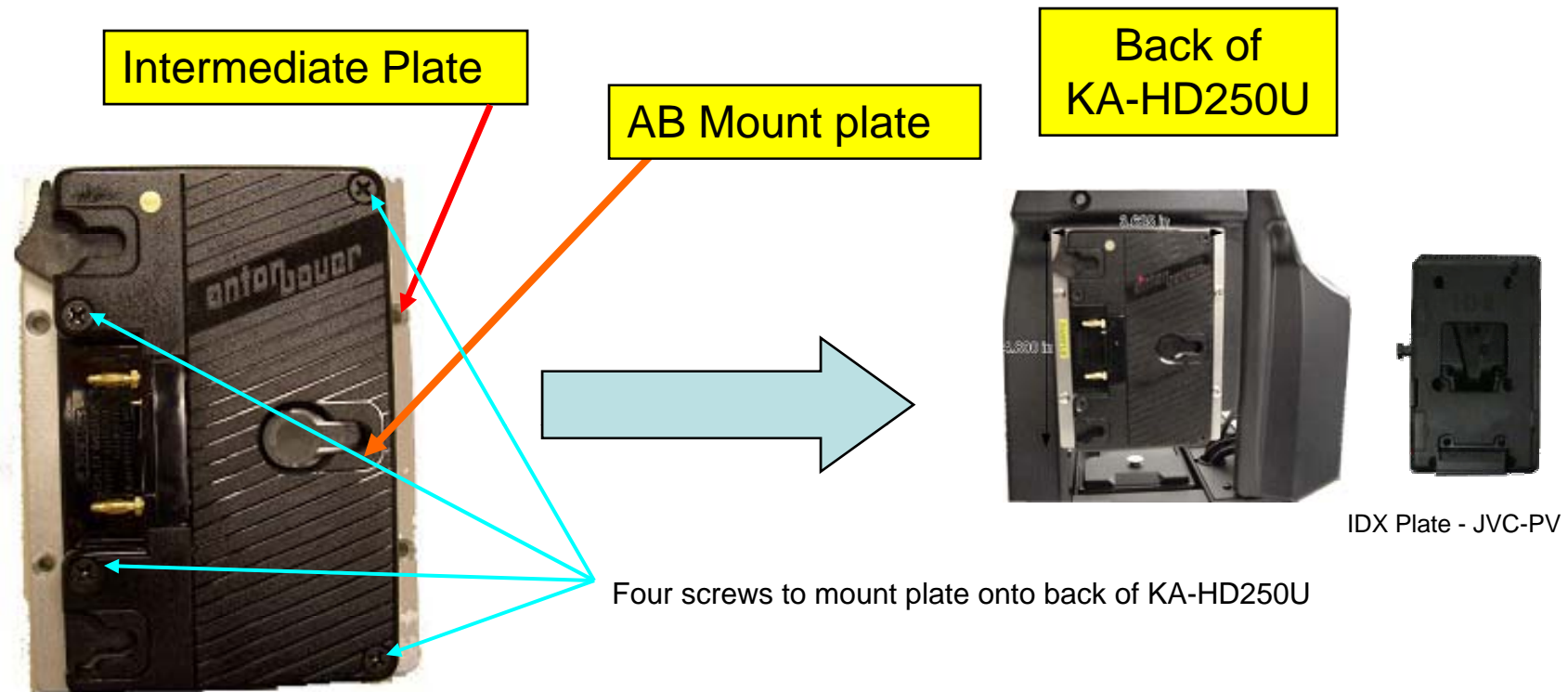


Routes Camera video or Return video to ENG view finder controlled by Lens Return button requires third party cabling. Set camera TALLY MENU to "STUDIO".



Return Video Box



**KA-BP250 Intermediate Plate (handled by JPC)**

The intermediate plate mounts on the back of the KA-HD250U. To this plate either an Anton Bauer or an IDX mount plate can be attached. The Complex or Telecast Fiber Camera adapter can then be attached to the KA-HD250U.

- Enables mounting an Anton Bauer or IDX Mount on the back of the KA-HD250U
- AB Mount plate: QX2
- IDX Mount plate: JVC-PV
- Intermediate Plate Part TBD

**CONTACT** : JVC Professional for availability of plate.

HD 1/3"mount bayonet lenses

Model	Focal Length mm	Angle of View	Filter Screw	IRIS Range
Th13X3.5BRM Fujinon	3.5-46	74° - 6.3°	82mmx0.75mm	F1.4 – F16
Th16X5.5BRM Fujinon	5.5-88	51° - 3.2°	82mmx0.75mm	F1.4 – F16
Th17X5BRM Fujinon	5.0-85	55° - 3.3°	82mmx0.75mm	F1.4 – F16
Th17X5BRD Fujinon	5.0-85	55° - 3.3°	82mmx0.75mm	F1.4 – F16
HTs18X4.2BRM Fujinon	4.2-76	63° - 4.0°	82mmx0.75mm	F1.4 – F16
KT20X5KRS Canon	5.0-100	52° - 2.8°	82mmx0.75mm	F1.4 – F16

**V-R70P-JVC Marshall 7" LCD Studio Monitor (USA exclusive model)**

- **HD/SD Compatible**
- § 800H x 480V Resolution
- **Analog Inputs –**
- § Composite
- § Component (3 BNC with loop through outputs)
- § Y/C
- **Blue Screen mode**
- **4:3 Aspect Markers**
- **Built-in Tally LEDs**
- **V-mount plate for Battery power**
- **JVC exclusive 16X9, 4:3, 16:9 + 4:3 Safety Markers**
- **12DV AC Power Supply with XLR cable**
- **1/4"-20 mounting plate – Provides mounting LCD to NOGA arm**

**V-R70P-JVC Kit Contents**

**Contents of V-R70P-JVC**

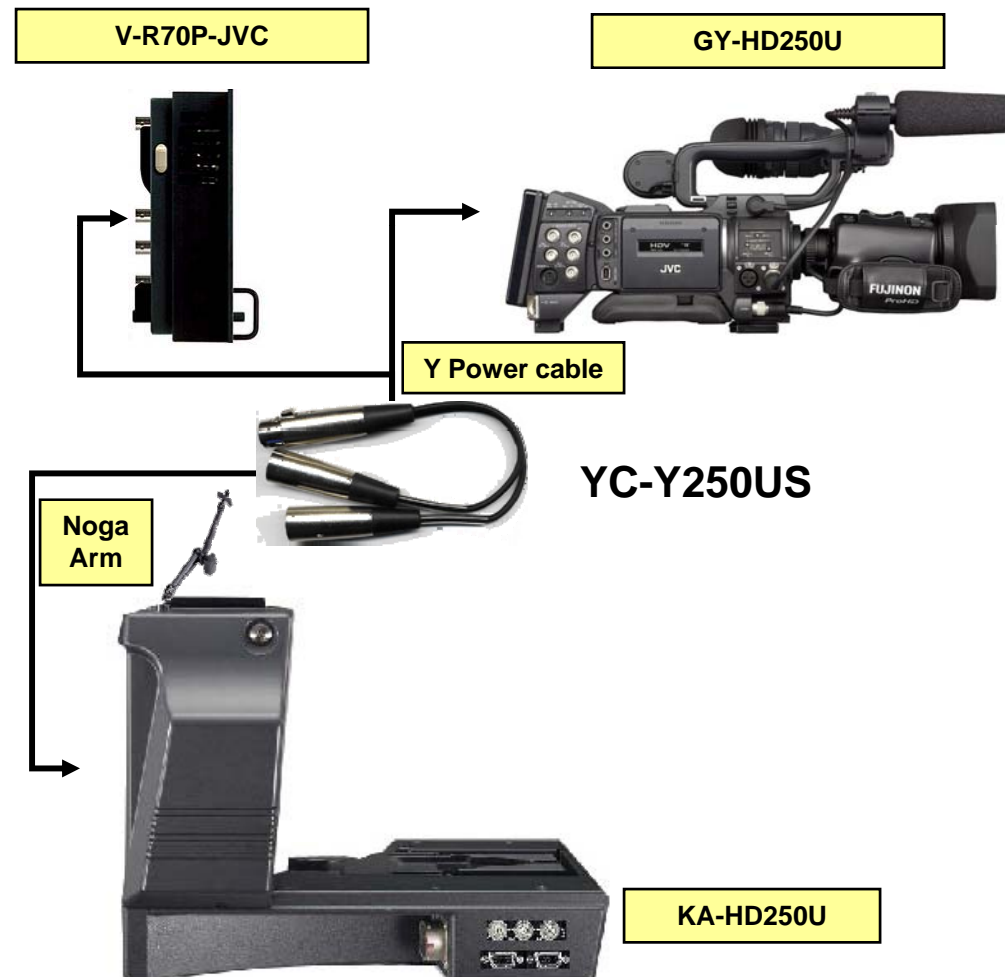
- RGB Cable
- Noga Arm
- Power supply
- Hood





**VC-Y250US XLR Power Y cable (handled by JPC)**

Used to supply the KA-HD250U's power to the GY-HD250U and the attached monitor.  
Use when 26-pin control cable is less than 70 meters.





**KA-P250U****20Pin to 4pin XLR power cable**

- Applies the 12v power outputted by the KA-HD250U' on its 20pin connector to an attached monitor.
- Use of this cable ensures reliable powering up of the GY-HD250U and the attached monitor.
- Should be used if the 26Pin multi core cable exceeds 70 meters



**KA-V400U**

Enables owners of VF-P400 to reuse their SD VF with a KA-HD250 studio adapter

This cable supplies video and power to the VF-P400U from the KA-HD250U.

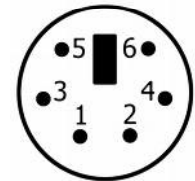
The built in RGB matrix circuit allows the VF-P400U to display all VF functions except focus assist.



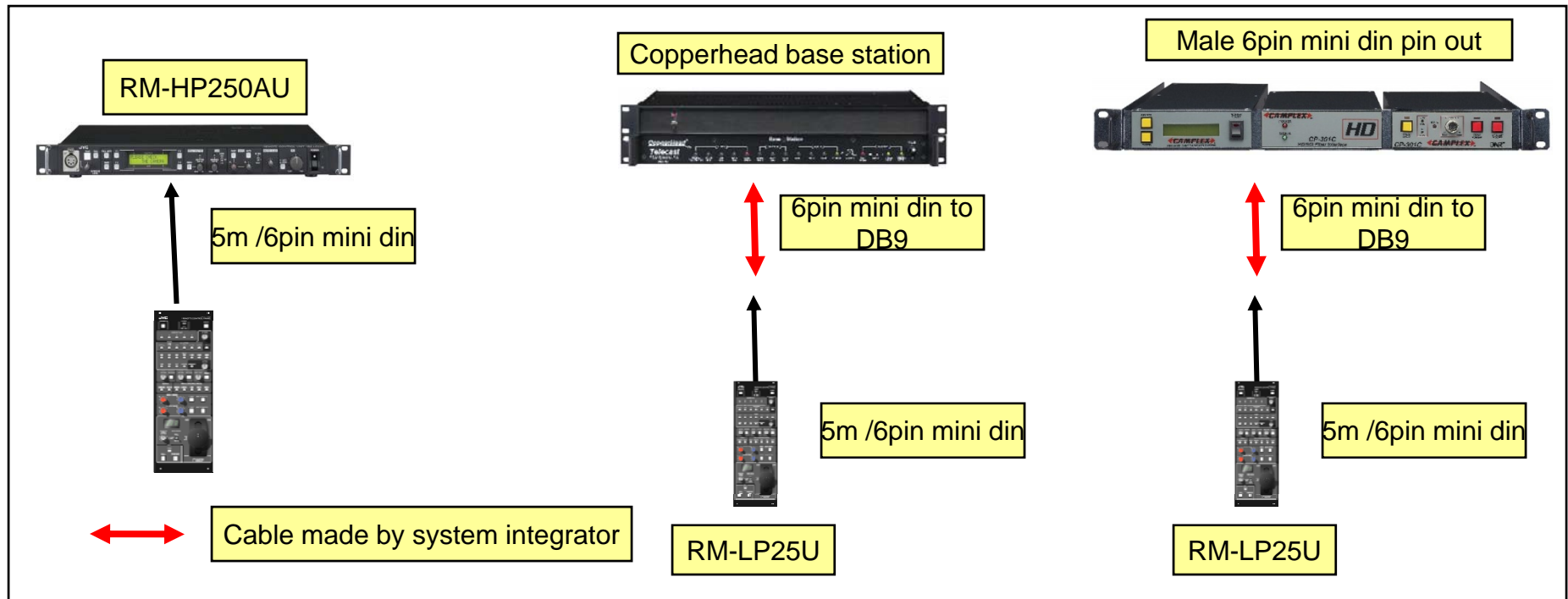
## RM-LP25U

Local remote control panel with granular control of the GY-HD250U's video image. Includes a robust joystick for control of IRIS and Master Black.

To use all of the RM-LP25U's features the GY-HD250U firmware must be updated. The GY-HD250U has the proper firmware if the camcorder has a "Tally" menu. The "Tally" menu item should be on page two of the GY-HD250U's "Others" menu. If the "Tally" menus is not there the camcorder's firmware should be updated. To update the camcorder's firmware visit JVC's professional products website at <http://pro.jvc.com/> Click on the support tab; then click on the firmware update link. Follow the firmware update page instructions.



Interface cable - 5m cable with mini-din male connector  
9V supply voltage  
2W power dissipation



RM - LP25U Interconnect Diagram

**RM-HP250AU** – Available Nov 2007

**HD/SD 26Pin CCU – HD equivalent of the RM-HP210U with expanded capabilities:**

**New Features**

- HD/SD – component outputs
- Genlock – BB or HDTV Trilevel sync
- 6pin mini DIN – Local remote control panel port
- Expanded Camera menu access

**Accessories not included:**

- 26Pin cable – VC-Pxx
- Remote Control Panels – RM-LP55, RM-LP57, RM-LP25, RM-LP35

**Firmware Upgrade:**

Firmware upgrade of GY-HD250U is required for the new camera control features introduced by the RM-HP250AU to be activated. To check if your camcorder has the required firmware visit JVC's professional products website at <http://pro.jvc.com/>; click on the support tab; then click on the firmware update link. Follow the firmware update page instructions.



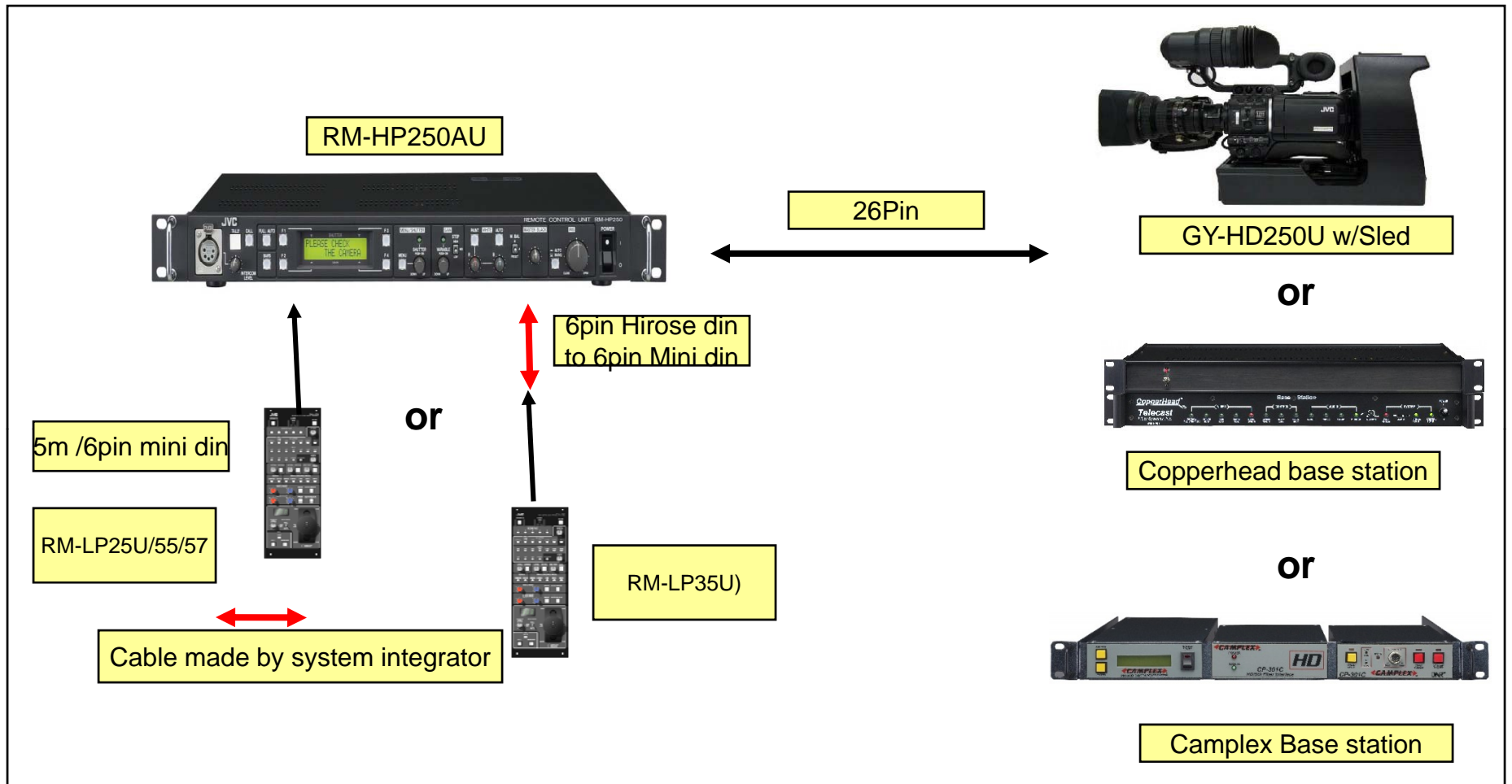
26pin cable  
VC-P110U -5m  
VC-P112U -20m  
VC-P113U -50m  
VC-P114U -100m



Cable Coupler  
KA-280U \*



\* Max cable length with extension is 100m



*RM-HP250AU Interconnect Diagram*

## VF-HP840U -

### **Color Studio View Finder - Available Jan 2008**

- 8.4" - 1024 X 768 resolution
- 16:9 mode - 1024 X 576 pixels
- Multi Format monitor –HD/SD 60Hz/50Hz SD RGB, HD/SD CMP, Y,
- 1:1 pixel display mode
- Return video input – B&W: CPS or HD Y
- PWR requirements – 12V, 12W
- 20Pin - Signal/Power input
- Front and rear Tally light
- Power Input – XLR or 20Pin KA-HD250U VF cable

#### **Built in:**

1. Aspect and safety zone markers
2. Customizable Zebra settings
3. Focus assist – Red, Green, Blue

#### **Included Accessories:**

- Hood
- 20Pin KA-HD250U VF cable

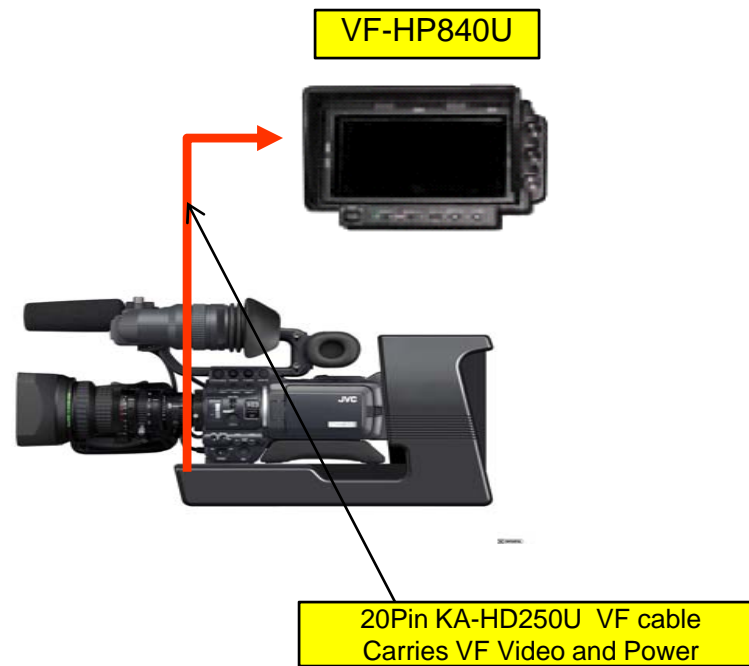
#### **Additional Accessory**

- 20Pin GY-HD250 VF cable - Model and Part Number TBA

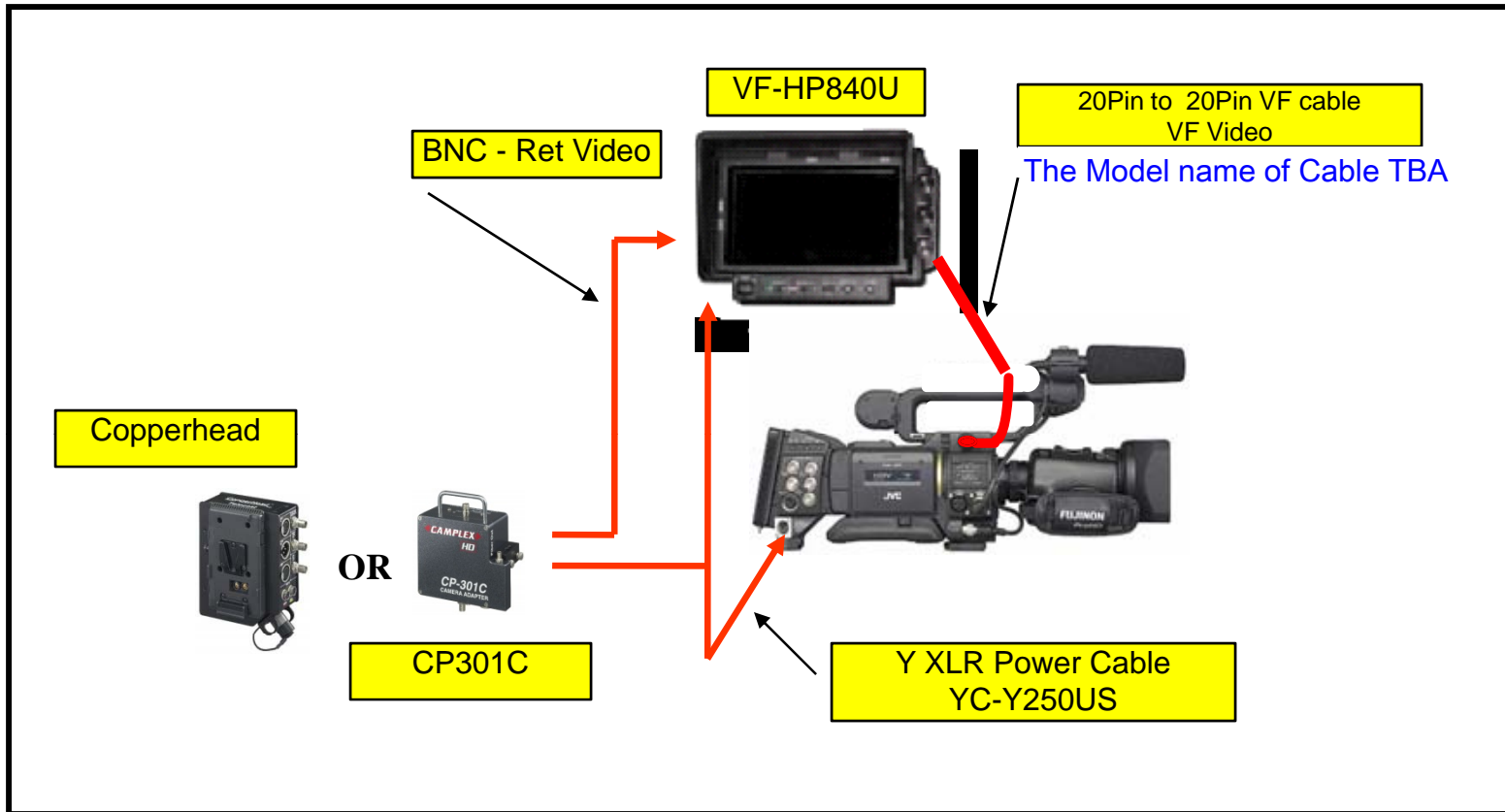
#### **Firmware Upgrade:**

Firmware upgrade of GY-HD250U is required for the VF-HP840U return video switching and tally display to work. To check if your camcorder has the required firmware visit JVC's professional products website at <http://pro.jvc.com/>; click on the support tab; then click on the firmware update link. Follow the firmware update page instructions.





***VF-HP840U and KA-HD250U Interconnect Diagram***



*VF-HP840U without KA-HD250U Interconnect Diagram*



**End**

